THE VETERINARY RECORD

A Weekly Journal for the Profession.

EDITED BY WILLIAM HUNTING, F.R.C.V.S.

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THE INTERNATIONAL CONGRESS FUND.

Mr. Garnett, the Treasurer of this Fund, was able to report good progress at the last meeting of the Yorkshire V.M.S.

The minimum sum required will be about £3,500; and of this £2,600 has already been promised. This is highly encouraging; but it must not be forgotten that we have now comparatively little time in which to secure the remainder. These Congresses have to be arranged a long time beforehand. The forthcoming one will not be actually held till the summer of 1914; but most of the arrangements for it will be made during the present year, and some, in fact, are already in progress. Obviously, therefore, the financial preparations should be pushed forward as expeditiously as possible; and at least the minimum sum required ought to be ensured to the Treasurer before the end of this year. Members should subscribe at once—either through the Secretary of a local Society, or direct to Mr. Garnett at Dalegarth, Windermere. Considering how very large a proportion of our members have not yet subscribed at all, it is quite clear that the amount still needed can easily be raised, unless our *esprit de corps* is confined to a very small percentage of the profession. Certainly the societies, and comparatively a few members, have set a good example to the rest.

THE USE AND DANGERS OF ARECOLINE.

Some mention has lately been made of arecoline and its dangers, especially in cattle practice. From time to time such questions arise—questions which mainly affect the clinician, which are of real importance in everyday practice, and concerning which we know something, but not enough.

We know that arecoline, as might be expected from the rapidity and power of its action, is not without danger. We know also that cattle have always been considered particularly sensitive to it. But we do not know either the frequence with which fatalities have occurred after moderate doses, or how far it is possible, by ordinary care, to avoid giving the drug in unsuitable cases. There are no very extensive records of its use in England, though it is certain that some of our members have employed it a great deal. Here we run against an old difficulty—the reluctance of practitioners to communicate their experience. There are men in the country who could give really useful information concerning arecoline, which at present is in the same dubious position as barium chloride. Both are undoubtedly valuable drugs in some cases, and there are good practitioners who have not yet ventured to use either.

DISCONTINUANCE OF USE OF MALLEIN IN RUSSIAN ARMY.

From Captain N. K. Averill, Military Attaché, St. Petersburg, Russia, January 3, 1913. No. 682. W. C. D. No. 5784-5.

The Assistant of the 1st Senior Quartermaster of the Chief Administration of the General Staff presents his compliments to the Military Attaché at the Embassy of the United States of America and has the honour to inform him that numerous experiments carried out in the Russian Army have proved that when the mallein test was applied to all horses, many healthy horses, who manifested a reaction after mallein were destroyed quite unnecessarily, and therefore, in order to save healthy horses from being killed in vain, the Order No. 190 of the War Department, 1912, was published prohibiting the use of mallein for the testing of horses.

At present it is allowed to apply mallein only to sick horses (cl. 12 of the Instructions, published in Order 197 of the War Department, 1910.)

Besides the above-mentioned experiments which led to the prohibition of applying mallein to all horses without exception, this decision is also founded on the scientific opinions of—

Prof. Damman (Germany) well known hygienist and epizootologist, who on being asked whether mallein might be considered as a sure means of determining the presence of glanders, replied decisively: "No, on no account." He adds moreover, that "experiments carried out in Germany have proved that horses who, after the inoculation of mallein, have suffered an increase of temperature of 2° C. and have, therefore, been recognised as suffering from glanders, when dissected, proved to be perfectly free from this disease, and on the contrary, others, on which mallein exercised no influence at all, or but a slight one, proved to be suffering from glanders."

Prof Ostertag (Germany) affirms, that "erroneous diagnosis have occurred precisely from the subcutaneous application of mallein."

Prof. Meissner (Germany) asserts, that "mallein is not an absolutely reliable means of determining the presence of glanders; not all horses suffering from this disease manifest a reaction after the injection of mallein, but many healthy horses also manifest a reaction."

Professor Hutyra (Austria) considers that "the destruction of horses for the sole reason that they manifest a reaction after application of mallein is wholly unfounded, as with most horses the disease may be suppressed in its primary stage."

Professor Edelman (Dresden) affirms, that "the destruction of horses on no other grounds than that they manifest a reaction after mallein occasions incalculable losses to agriculture."

Professor Freuner (Germany) acknowledged, that "the subcutaneous application of mallein is of no importance whatever in the establishing of a diagnosis."

Professors Moller and Eichhorn (Washington) assert, that "mallein is not an effective diagnostic means for determining the presence of glanders and, therefore, it cannot be recognised as an indicator of this disease."

Professor Halter (France) points out that "the inoculation of mallein may be applied only in those cases when clinical tests of a sick horse do not establish a definite diagnosis; but in such cases, together with the application of mallein there must also be made inoculations with pathological products, taken from the sick horse, on impressionable animals."

Dr. Martel, Chief Sanitary Veterinary Surgeon, Paris, in stating proofs, thereof, that in France horses are not killed exclusively on the indications obtained in consequence of the application of mallein, says that "out of 700 horses to whom mallein was applied, 350 manifested a reaction after the injections (50 per cent.), but only 54 (12.9 per cent.) had to be killed."

Prof. Perroncito (Italy) does not consider mallein to be a sure means for establishing a diagnosis. According to his opinion, "mallein gives about 20 per cent. erroneous indications, and, therefore, in determining the presence of glanders in a horse the experimental method must be applied (inoculations to smaller animals, bacteriological analysis.)"

Comment by Mr. Hunting.

The above remarkable note on mallein appears to be an official fly-sheet issued by the War Office of the U.S.A. For a copy I am indebted to V.S. Hill, of the U.S.A. Field Artillery. No details are given of the Russian experience, and the quotations from Authorities are so brief, and in some cases so dogmatic that they leave little room for comment.

Professor Damman, it is said, was asked "Is mallein a sure test for glanders?" and replied "No, on no account." The value of the answer depends on what was meant by the word *sure*. If it means infallible, nothing more need be said. No one has ever made such a claim for it.

Professor Ostertag affirms that "erroneous diagnosis has occurred from the test of mallein." The Professor may have said this, but I should think he was only stating a fact, without any idea of the use his reply might be put to.

Professor Meissner asserts that mallein "is not an absolutely reliable means of detecting the presence of glanders." Here, again, is an answer to an academic question which has no bearing on the practical value of mallein.

Professor Hutyra considers that "the destruction of horses for the sole reason that they manifest a reaction after application of mallein is wholly unfounded." I wonder what his experience is?

Professor Edelman affirms that—"the destruction of horses on no other grounds than that they manifest a reaction to mallein occasions incalculable losses to agriculture." Incalculable suggests *very great* loss, and I should be glad of his statistics. I quite fail to understand the loss "*to agriculture*," as everybody knows glanders does not prevail much on farms—it is a disease of towns and armies.

Professor Freuner *(sic)* acknowledges "that the subcutaneous use of mallein is of no importance whatever in the establishment of a diagnosis." This is very positive—more like the expression of a student than of a professor.

Professors Möller and Eichhorn assert "that mallein is not an *effective* diagnostic means." Here again I ask what they mean by effective?

Dr. Martel says that "out of 700 horses to whom mallein was applied, 350 manifested a reaction but only 54 had to be killed." What is the value of this statement? Who knows the condition of the horses that were not killed?

Prof. Perroncito is of opinion "that mallein gives about 20 per cent. of erroneous indications." I should like the facts upon which this estimate is based.

I do not merely venture to give an opposing opinion to the curt statements of these authorities, but I offer the experience gained in London in an organised effort to stamp out the disease.

On January 1st, 1908, the Glanders Order came into force, and since then every case of glanders discovered in London has been slaughtered and examined post-mortem. The appearance of a clinical case of the disease in a stable has always been followed by the application of the mallein test to every horse in the stables, and many stables contained over 1,000 horses. Before the Order was issued there were 30 cases of disease every week, now there are about two, and in some weeks we have had none. Practically we may claim to have stamped out the disease, and whatever the methods adopted they have proved useful and effective. Every clinical case was slaughtered at once. Every horse killed on a mallein reaction alone was examined post-mortem and the owner invited to attend or send his veterinary surgeon to see if lesions of glanders were present.

Since the present Glanders Order came into force over 49,000 horses have been tested with mallein and every reactor slaughtered. About 3,000 horses reacted, and in only a dozen of these have characteristic lesions not been found. These figures are obtained by very careful work done under the Order of the Board of Agriculture and administered by the London County Council, who had to pay compensation for every case killed—including full value for every horse where no disease could be detected on autopsy.

I venture to think these facts are sufficient excuse for my disagreeing with the statements in the fly-sheet above. It may be that as large an experience as this is enjoyed by the learned professors quoted as authorities, but I cannot think so, and I should advise no one to neglect the use of mallein. In London we could not have arrived where we are without it.

William Hunting, F.R.C.V.S.,
late Chief Vety. Inspector to the L.C.C.

PLEURITIC EFFUSION.

In view of the widespread interest that has been taken in Major E. E. Martin's able and instructive article on the treatment of pleuritic effusions, the following notes may be of some slight interest to the profession.

Subject.—Artillery draught gelding, aged six, in good condition.

Symptoms.—February 7th. Admitted to Infirmary, temperature 105·8, pulse 50, full and bounding; respiration 24. No diminution noticeable in appetite. Membranes slightly injected; auscultation

revealed some increased sounds in the bronchial area.

Treatment.—Placed in loose box with door and window fastened open. Mustard to both sides of chest for thirty minutes. Internally, Sodii salyc. and Ammon. carb. balls alternately every four hours. Salines in drinking water.

Feb. 8th.—Temperature 105·2, pulse 62, respiration 26. Still feeding well; no change found on auscultation.

Feb. 9th.—Temperature declining slightly (104·4), otherwise unchanged.

Feb. 11th.—Respirations rather more laboured. Mustard repeated.

Feb. 13th.—Temperature remains high. Area of roughened breathing appears to be extending and *râles* can be detected. Cannot distinguish presence of fluid, but respiratory distress and acute knowledge of my limitations in the way of accurate auscultation decided me to try "tapping." This was done on the right side, but without any result.

Feb. 15th.—Temperature gradually declining and is now 102. Respiration easier and only slightly hurried (22).

Feb. 16th.—Temperature 102·8. Auscultation reveals no evidence of any change in respiratory sounds. Breathing rather laboured. This evening animal refuses food.

17th Battery R.F.A. No. 68713. *Disease*—Pneumonia Ulcer, Pleurisy. Cured. Feb. 26th. *Station*—Hilsea.

1913.	Temp. A.M.	Temp. P.M.	Pulse. A.M.	Pulse. P.M.	Resp. A.M.	Resp. P.M.
Feb. 7. (*a*)	105·8	105·3	50	56	24	30
8	105·1	104·8	62	64	26	28
9	104·4	103·6	54	58	24	30
10	103·9	104·8	60	62	24	26
11 (*b*)	104·6	104·2	54	58	20	26
12	104·6	104·3	50	48	28	32
13 (*c*)	104·3	103·3	56	50	30	24
14	102·6	102·2	46	50	26	30
15	102·2	102	48	56	22	24
16	102·7	102·9	60	64	24	30
17 (*d*)	104·1	102·9	72	60	60	40
18	100.9	100·9	48	46	18	20
19	100·9	99·6	46	44	19	16
20	100·9	100·8	47	44	20	18
21	101·1	101·1	50	48	22	22
22	100·4	100·9	48	44	20	16
23	101·1	100·2	46	48	18	20
24	100·2	100·6	46	44	20	16
25	100·8	100·7	44	46	16	18
26	100·9	100·9	48	44	16	20

(*a*) Mustard to sides, Sod. Sal. and Ammon. Carb.
(*b*) Repeat Mustard.
(*c*) "Tap" chest: no result.
(*d*) Tapping removes 53 pints fluid.

Feb. 17th.—Temp. 104·2, pulse 72, weak and thready, and almost imperceptible at jaw. Respirations 60. Animal is greatly distressed, head and neck extended, nostrils widely dilated, corners of mouth drawn back, and general appearance of great pain; extremities cold. Fluid easily detected in thorax. Administered Ether meth. subcutaneously, and after a short interval tapped the chest, resulting in the removal of 52 pints 18 ozs. of fluid. When this amount had been removed—it took over an hour to do so—the horse became very exhausted, and I decided to leave what little fluid was left still remaining. Two hours later respirations were 40, and animal has fed. That evening temperature was 103, respirations 40, pulse 60 and improving in tone.

Feb. 18th.—Temp. 101, pulse 48, respirations 18.

Feb. 27th.—Animal has gradually returned to normal, and is now well on the way to recovery.

There are two points which have proved interesting to me in this case:

(1) Although I have seen many horses tapped, both at Bulford Camp, where I was working under Major Martin, and elsewhere, I have never seen so much fluid removed from an acute case.

(2) It forces the lesson upon me once more that these effusions do not take long to form, in fact that a very large amount may collect in a very few hours, teaching one the necessity of careful, and, at least, daily auscultation. It would, perhaps, here have been more striking if I had not been content with auscultation but had tapped on the 16th.

I remember a similar case which I had care of at Bulford Camp in which, as far as my memory serves me, I did tap without success one afternoon about 4 p.m., and yet removed somewhere about 25 to 30 pints on the following day at 11 a.m.

R. Ferguson Stirling, F.R.C.V.S., Lt. A.V.C.

ABSTRACTS FROM FOREIGN JOURNALS

A Filaria of the Camel.

Prof. Antonio Pricolo, a veterinary officer attached to the military bacteriological laboratory at Tripoli, has there found the embryos of filariæ in the blood of camels which had come from Tunis and Erythræa. The embryos are from 250 to 298 microns long, and have rounded heads and curved pointed tails. They show lively body movements, constantly turning the head alternately to the right and left, and writhing and twisting; but they do not move rapidly from place to place. The cuticle is very refractile, and the protoplasm is granular. They are only present in moderate numbers in the blood, and even seem to disappear from the peripheral circulation during the day. Camels harbouring them showed a high degree of anæmia, hydræmia, and emaciation.

More recently, Pricolo has found the worm in the adult state in the small branches of the pulmonary and great testicular artery of the camel. They settle in vessels of small calibre, which present aneurysmal dilatations at the points of lodgment of the worms, and the parasites are found, either singly or two or three together, coiled up in these dilatations.

In time the aneurysmal swellings indurate into hard nodules and finally calcify, and Pricolo, having studied these nodules in all stages of their develop-

ment and discovered remains of parasites in those in which induration was proceeding, concludes that the completely calcareous nodules, in which no trace of a parasite is demonstrable, are also of parasitic origin. Similar nodules were also found in the testicles, lungs, liver, and in the wall of the small intestine.

As a proof of the relationship between the embryos circulating in the blood and the adult worms, Pricolo cites the discovery, in one subject, of adult worms in the testicles and embryos in the circulating blood.

The testicles containing the worms and nodules preserve their normal shape, but are somewhat increased in size, are augmented in consistence, and are white in colour. Their parenchyma is suppressed, and they are composed solely of connective tissue. Histologically, the vessels are found to be dilated, and are often encircled by some concentric rings of stratified and very firm connective tissue. These stratified masses, however, are small and only found here and there amidst the rest of the connective tissue, which is pearly white, and shows a varying disposition of its fibres.

Pricolo gives a detailed description of the adult worms, the following being the most important points. They are flesh-coloured, but become pearly after washing. A male and female are distinguished. The *female* has the appearance of a thick thread of suture silk, or an analogous thread of catgut, is about 22 centimetres long and about 665 microns thick. The head, about 140 microns broad, has a circular mouth without papillæ; it is suddenly constricted to form a neck about 117 microns long and thinner than the head, then the thickness gradually augments, and the body, in which the ovaries are visible, commences. The tail terminates abruptly, and differs essentially from that of the male. The ovaries contain thousands of cells in various stages of development. The ovarian cells are polygonal in outline, and vary little in length, which averages about 30 microns, but they are extremely variable as regards breadth, which may oscillate between 11 and 20 microns. The ova are oval in outline, and contain embryos in various stages of development. The single ovum, contained in an envelope, is about 32 microns long and 12 to 16 microns broad. The embryo, curled upon itself, forms three segments joined by two angles or curves; if there are four segments the number of curves is three.

The *male* worm has the appearance of a silk suture thread of medium calibre or an analogous thread of catgut. Length 8 to 12 centimetres, thickness about 300 microns. The head, about 105 microns broad, is separated from the body by a short neck. The body is about 160 microns thick at its commencement, gradually increases conically, then becomes cylindrical and attains a maximum thickness of 350 microns. At about three-quarters of its length it ceases to be regularly cylindrical, and gradually becomes smaller till, about a centimetre before the caudal extremity, it only reaches a thickness of about 80 microns. The caudal extremity itself is very slender, and presents three curves.

Many camels harbouring these filariæ died, but it is not easy to say at present how much influence the worms had in causing death, as many and varied other factors may have influenced it.—(*La Clinica Vét.*).

W. R, C.

Interesting Case of Pneumothorax in a Cow from Echinococcus in the Lung.

A cow had been ailing for a fortnight, she was dull, with loss of appetite and milk, there was subcutaneous emphysema in the region of the right shoulder. Examination of the lungs revealed pneumo-thoracis on the right side, with a hole between the 8th and 9th ribs, and a similar hole near the right kidney; the skin was sound over both, which appeared to have existed some time. Two weeks later, the day before slaughter, the subcutaneous emphysema had spread over the whole body. The right lung produced no respiratory sounds, the left lung appeared to be normal. Temperature was 38·4 C.

Post-mortem revealed a large air bladder near the kidneys, especially on the right side, the kidney fat was filled with air, which had penetrated its whole structure. There was no sharp body among the organs which could have caused the holes, but in the lungs there were some echinococcus cysts, one of which on the right had ruptured, it was on the edge of the lung and when one squeezed the lung air came from the cyst, which acted as a bellows valve and forced the air through the hole between the ribs, filled the subcutaneous tissue and kidney fat. The case appears to be unique,—(N. Foss, Ufa, Russia)

Trans. ex Esperanto F. E. P.

LINCOLNSHIRE AND DISTRICT VETERINARY MEDICAL SOCIETY.

The 31st annual meeting was held at the "George" Hotel, Grantham, on Thursday, Feb. 13, the President, Mr. H. H. Truman, M.R.C.V.S., of March, in the chair. There were also present: Messrs. W. W. Grasby, Daventry, Vice-president; F. L. Gooch, Stamford; C. Hartley, senr., C. Hartley, jun., Lincoln; T. Hicks, A. D. Lalor, Sleaford; A. R. Routledge, Louth; T. A. Rudkin and F. H. Sugden, Grantham; C. W. Townsend, Long Stanton, hon. sec.; and Mr. Jas. Smith, Wetherby, a visitor.

Letters of apology for absence were received from Messsrs. Alex. McTurk, T. B. Bindloss, R. W. Knowles, J. F. Bingham, A. C. Comerford, F. Hobday, G. T. Willows, and S. G. Masterman.

The minutes were taken as read.

It was decided, on the motion of Mr. Gooch, seconded by Mr. Routledge, to give a donation of two guineas to the Victoria Veterinary Benevolent Fund.

The International Congress.

Mr. Hon. Sec. said he had received several letters with regard to the International Congress to be held in London in 1914. He had sent out letters to all members, in accordance with the wish expressed at a previous meeting, asking for donations to the expenses of the

Congress, but he had had very few replies, he was sorry to say. The President had sent a donation, and several other members had promised various sums. It was a most important matter, and he hoped the Society would not be lacking in giving subscriptions.

The PRESIDENT said they were all aware of the need of financially supporting the Congress. They owed a debt of gratitude to Sir Stewart Stockman for his kindness in coming down to give them a demonstration in the summer, and also for taking them over his laboratory in London in the autumn, and as he took so much interest in the Congress—much of the work of which would devolve upon him—they ought to do their level best individually to help it, as much for Sir Stewart Stockman as for the benefit of the profession. He had sent five guineas, and he hoped they would all do something. He hoped they would also make a donation from the surplus funds of the Association. He did not think it necessary for them to hoard money, and if they kept a working balance it was all that was wanted.

Mr. GOOCH said it was not a national but an international matter, and for the credit of the Association they should support the Congress. He had promised ten guineas spread over three years. Mr. Garnett said he still wanted £800 for this year, and he would like promises that would be payable before the end of 1914. The organising committee were anxious that members should do all they could for 1912-13, so that if in 1914 £3,500 had not been raised, pressure could be put upon the various societies. If they could raise the money from individual members in three years that would not be necessary. They wanted to accord to their foreign *confrères* the same hospitality they received when the Congress was held abroad. He thought that they need not make a grant from the Association until the annual meeting of 1914, when they would know how much of the necessary £3,500 had been raised.

Mr. RUDKIN: Have other societies subscribed?

The HON. SEC.: Yes, the Eastern and the Southern, and the Royal Counties. Lists have been published. We have only four names from members of our Society, but I think that some of our members belonging to other societies have subscribed through them.

Mr. GOOCH: Mine has been put down as paid to the Midland through the Lincolnshire Society.

The PRESIDENT said it would be helpful to the Treasurer if members would notify the amounts they were prepared to give. The sum could be split into annual payments.

Mr. GRASBY agreed with Mr. Gooch that they should leave the question of a donation from the Association until the next annual meeting. There were many practitioners who did not belong to any association, and he thought the Congress should be supported by every veterinary surgeon in the kingdom, whether they belonged to a society or not. He thought there were very few but would send something.

Several of the members present promised donations, and it was decided to leave the question of making a grant from the funds of the Association to the next annual meeting, the Hon. Sec. to write Mr. Garnett to that effect.

VETERINARY INSPECTORS' FEES.

The circular letter was read from the Secretary of the Southern Branch of the N. V. A. with regard to the proposed scale of fees payable by the local authorities to veterinary inspectors.

The PRESIDENT hoped that effective action would be taken. The fees in Cambridgeshire and Isle of Ely were about the lowest of any County Councils.

Mr. GRASBY: This suggested uniform scale will come before the National.

Mr. GOOCH: Yes, nothing will be done before the National meeting. We took five hours over it at the Council meeting in London, and readjusted the fees. The form you have before you is an amended scale sent out by the National Association, who will take the incubus of the work on their own shoulders, consult the different societies, and demand these fees from the County Councils. If they are not conceded the members of the National will decline their services.

The PRESIDENT: Compared with what I get this scale of fees makes my mouth water. (Laughter).

Mr. GRASBY said if the proposed scale was uniformly adopted it would bring joy to the heart of the veterinary inspector, who had been paid like a mechanic. He moved that they pledge themselves to support the new scale of fees as suggested by the Council of the National Association.

Mr. ROUTLEDGE seconded, and said he recently had to look over 20 animals for the Lindsey County Council, who offered him a guinea for a day's work, which he refused to take.

Mr. GRASBY said it was difficult to fix a scale in cases of foot-and-mouth disease. Half-a-guinea would not pay a veterinary surgeon to look over 200 or 300 head of cattle. But they were generally in bunches of ten.

Mr. ROUTLEDGE said the Councillors told him "The remedy is in your own hands. We know you are not being paid sufficiently. If you tell us what you want we will pay more."

Mr. GOOCH: This scale does not apply to Anthrax, but to ordinary disease.

The resolution was carried, the Hon. Sec. to forward it to the Council.

ORGANISATION.

Mr. Theo. C. Toope, the Secretary of the Southern Branch of the N. V. A., wrote asking for a list of paying and honorary members, and stating that he hoped to attend a meeting of the Association as he was now visiting various societies in his branch with a view of getting in closer touch with his various branches.

The request was granted.

INSURANCE CLAIMS.

A letter from the South-Eastern Association was read re the fees payable by the Insurance Companies to veterinary surgeons, but as sufficient time was not at the disposal of the members that afternoon it was proposed by Mr. Grasby, seconded by Mr. Rudkin, that discussion on this should be postponed until next meeting.

ROYAL SANITARY INSTITUTE.

A letter asking for delegates to be appointed to the Sanitary Conference at Exeter on July 7 to 12 evoked no response from members, and it was agreed it was too far away.

NEW MEMBER.

Mr. A. J. HINES was nominated by Mr. Routledge, seconded by Mr. Rudkin, and duly elected a member.

ANNUAL REPORT.

The HON. SEC. said that as there were so many items on the agenda for consideration he thought that it would suffice if this year the members would excuse a lengthy report. He would, however, like to congratulate our President upon the highly successful year which the Society had had under his presidency, the meetings had been much better attended than they had been for some time, and he hoped they would continue. They had also augmented their list of members which now numbered fifty. In the balance sheet they could see that the Society was in a fairly sound financial position.

The TREASURER (Mr. Townsend) presented the balance sheet. At the beginning of 1912 the balance in hand was £23 3s. 11d. as against £20 6s. in 1911. At the present time it was £23 14s. 9d., but since the pass book had been made up, the sum of £8 12s. 6d. for late

subscriptions had been paid in, and a further amount of £6 10s. had been received, which brought the total balance up to nearly £40.

Mr. LOCKWOOD: The Treasurer has in my opinion done excellently.

On the motion of Mr. Gooch, seconded by Mr. Rudkin, the balance sheet, which had been audited, was adopted.

The TREASURER remarked that a cheque for 3/6 paid in April 24, 1911 to Mr. Bullock for a new register had not been passed through the Bank, though he had the receipt for it. Mr. Bullock had, however, written to say that he had been paid the cheque through the National and Provincial Bank, the loss was therefore our own bankers.

ELECTION OF OFFICERS.

Mr. F L. GOOCH said he had the honour of proposing as their President for the ensuing year an old member of that Society who had done a lot of work for them for several years, viz., their Secretary, Mr. Townsend. (Applause). He had not previously consulted Mr. Townsend, but if he would take the office there was another gentleman who would relieve him of the secretarial duties during the next 12 months.

Mr. RUDKIN had very great pleasure in seconding. He did not think anyone had taken half the interest in the Association that Mr. Townsend had in the last few years.

Mr. W. W. GRASBY, in supporting, re-echoed all that had been said of an esteemed and hard-working officer, and

Mr. GEO. LOCKWOOD agreed that it was all they could do to recognise the efforts of one who had taken such an interest in the Association and its members.

The resolution was carried unanimously.

Mr. TOWNSEND, in returning thanks for his election as President, said that this honour had come upon him as a great surprise. He had no idea when he came into the room that afternoon that they were going to ask him to take such an important office. He was rather young, perhaps, to fulfil it, but he could assure them that he should do all in his power in the future as he had done in the past to make the Association a success. Anything he had done for the Society in the past he could assure them had given him great pleasure, and he once more thanked them for the great honour they had conferred upon him. (Applause).

Vice-presidents.—Mr. W. W. Grasby, Mr. T. Holmes, and Mr. H. H. Truman were elected, on the proposition of Mr. Lockwood, seconded by Mr. Rudkin.

Hon. Sec.—Mr. GOOCH said he had asked Mr. Tom Hicks, of Sleaford, to act as secretary for the year and he had consented. He was sure Mr. Hicks would do them credit, and he had great pleasure in proposing him for the office.

Mr. LOCKWOOD, in seconding, said he was sure Mr. Hicks would do his utmost to instil into the members that interest which Mr. Townsend had gone to such trouble to enthuse, and he hoped they would have good meetings and good attendance under Mr. Hicks' secretaryship as they had under their new President's. The motion was carried.

Mr. HICKS, in thanking the members, said he felt he should make a very indifferent secretary after Mr. Townsend, but all he could say was that he would do his level best.

Auditors.—Mr. Rudkin and Mr. Sugden were reappointed.

THE ANÆSTHETICS BILL.

Mr. GOOCH, who was called upon to open a discussion on the new Anæsthetics Bill, remarked that there was not much to be said, because he did not think the bill would ever become law. Most of them had no doubt read the bill which had appeared in *The Record* for August 3 last year, since then many letters had been published in the veterinary papers (including some from their secretary, who had also written to members of Parliament on the matter), some letters were for and some against. The main discussion had been about castration. But as a profession they would be the last to allow any unnecessary cruelty among the domesticated animals they were called on to operate upon or to treat. The bill had evidently been drafted by someone who did not understand comparative surgery or the work of the veterinary profession, and it contained clauses with which they could not agree. Why was not the Royal College of Veterinary Surgeons consulted before it was brought before Parliament, and why was the Board of Agriculture the body selected to alter or add to the Bill as stated in Section 3, also consulted. If the Bill was carried the Board might dictate to the profession as to what operation the veterinary surgeon was to use an anæsthetic. According to Clause 2 of Section 1 of the Bill "A horse . . . or pig . . . shall not be subjected to any operation specified in the Second Schedule or the Act, unless the animal during the whole of the operation is under the influence of some general anæsthetic of sufficient power to prevent the animal feeling pain." He for one objected to that. Castration could not be carried out if the standing operation was performed, and for some of the operations included he was of opinion that the animal suffered more from shock during the exciting stages of the anæsthetic than from the operation itself. Then again under the same Clause "No bull or pig shall be subjected to an operation for castration after the age of six months, unless the operation is performed for the purpose of curing or alleviating some disease or the effect of some accident. (Laughter). Many veterinary surgeons were called upon to operate after that age, particularly if they had made a study of shorthorns. Many were kept until eight months old, but in that case they were not to operate and the animal must be kept entire or until he could be fattened for the butcher. (A Member: "Or his age forgotten"). He objected to operations for poll evil, fistulous withers, and line firing being included in the schedule. He had spoken to several Members of Parliament, who said the Bill would never pass, but if there was a likelihood of it doing so they should raise a strong protest against it.

Mr. TOWNSEND said they had no doubt seen and read the letters which he had written to *The Record* on the matter, and all he should like to say was that personally his great reason for opposing the Bill was that it was in his opinion a great insult to the profession as a whole. The Bill had been introduced by men who knew nothing about veterinary surgery or operations, and who sought to dictate to them as to what operations they should perform under chloroform and what operations they should not; as in the case of stripping the sole, fistulous withers, and castration of the bull or pig. He had written to a Liberal member on the subject and also to his Conservative opponent. The Hon. E. S. Montagu assured him that the Bill was not a government measure and there was no likelihood of it becoming law this Session. Mr. Douglas Newton said it had been read a first time and would be dropped, but he asked to be kept advised in the matter.

The PRESIDENT said that the Bill being practically dead they need not discuss it.

Mr. RUDKIN agreed. He was a great believer in anæsthetics, but he did not want to be dictated to when to use them or not. (Hear, hear).

Mr. GOOCH proposed that no action be taken. The Parliamentary Committee would look after it if the Bill was ever introduced again.

The matter then dropped.

Instruments.

Mr. Townsend brought forward a suggestion that the Society should add to its stock of instruments, remarking that those required for dentition were most in demand by members.

Mr. Gooch renewed an offer he made at Peterborough to lend any member an instrument of his own design to remove small prominences from the end of the last molar.

The President said Americans made a feature of dentition, and promised to get catalogues from prominent instrument makers in the States, and bring them to the next meeting for members to see.

It was agreed to adjourn the matter to the next meeting.

Sir Stewart Stockman Congratulated.

The President (Mr. H. H. Truman) said that early in the new year Mr. Stewart Stockman, who was so kind to them last summer, and again in the autumn, had the honour of knighthood conferred upon him by His Majesty the King, and he thought before they dispersed that afternoon they should tender to him their hearty congratulations. They took a personal interest in him, for he was their latest honorary member, and the honour bestowed upon him was reflected on their Society and on the whole of the profession. He proposed "That the congratulation of the Society be sent to Sir Stewart Stockman on the honour of Knighthood he has received from His Majesty." (Applause).

Mr. F. L. Gooch had great pleasure in seconding, for Sir Stewart had earned his honour. He was a young practitioner, but he had done great work in this country and abroad, and no man had done more to advance and enhance the veterinary profession. (Applause).

Mr. Rudkin supported, and said Sir Stewart deserved their thanks for the kindness he had shown the Society. (Hear, hear).

The motion was carried with acclamation.

Specimens.

Mr. Routledge produced two very interesting pathological specimens.

I. Rupture of the Flexor Perforans tendon following median neurectomy and also exhibited photographs to illustrate the characteristic posture of the limb.

The subject was an aged hunting mare so lame from old standing navicular disease that she was incapable of doing any work, the operation enabled her to go back to her usual employment practically sound, in fact she was now going better than she had done for years, the owner being quite delighted with the result. About six months later she was left in the harvest field unattended, something startled her and she galloped away, and pulled up on three legs, the fetlock sinking to the ground, and the toe cocking up when weight was put on the limb. She was shot; the specimen shows clearly the rupture in the usual position in the hollow of the heel, and well-marked navicular disease.

II. A specimen of what Mr. Hunting calls suffraginitis, from the near fore fetlock of a hunter, remarking that they were very unsatisfactory cases to treat. This horse had been fired and blistered, but kindly settled the question as to whether it would stand work by dying from suppuration in the throat.

Time being too short for a discussion on a paper on "Mastitis in Cows," by Mr. Lockwood, he agreed to postpone its reading until the next meeting at Peterborough in June.

A hearty vote of thanks to the retiring President was proposed by Mr. Rudkin and Mr. Townsend, the President elect, in seconding, thanked Mr. Truman for the great interest he had shown in the Society, in the midst of his many duties, and said that the prediction which he made when he had the pleasure of proposing him as their President, viz.—that if they elected Mr. Truman as their President he would do credit to that Society, a prediction which he felt sure had been amply justified for they had not only had a most successful year but excellent meetings. (Applause).

Mr. Truman, in reply, said his heart was in the work of the Society, and with the kind help of the secretary, and their sympathetic support, he thought they had had a fairly successful year, the attendance at the meetings having been good, thanks to Sir Stewart Stockman. He felt sure Mr. Townsend would do as good work in the presidential office as he had done in that of secretary.

The members then adjourned to a *recherché* little repast.

C. W. Townsend, Hon. Sec.

EASTERN COUNTIES VETERINARY MEDICAL SOCIETY.

The annual meeting was held at the Bell Hotel, Norwich, on Tuesday, February 11th. In the absence through indisposition of the President, Mr. E. H. Leach, Mr. T. G. Heatley, Woodbridge, was voted to the Chair. Amongst those present were Messrs. J. E. Kitchin, London; H. V. Low, Norwich; Arthur Holl, New Buckenham; F. B. O. Taylor, Weston; Wm. Shipley, W. L. Little, Yarmouth; H. Buckingham, Norwich; M. Bray, Docking; John Barr, Acle; B. W. Bloomfield, Watton; E. Margarson, Swaffham; T. E. Auger, Wymondham; J. J. Scott, Colchester; William Turtill, Wickham Market; H. E. Wilkinson, Martham; F. Morton Wallis, Halstead; J. K. Gooch, Holt; W. W. Kerr, East Dereham; G. McIntyre, Beccles; W. M. Reeman, Bury; J. R. Godbolt, Stowmarket; J. Bee, Fakenham; T. E. Barcham, North Walsham; A. McTurk, Swaffham; A. Holl, jun., New Buckenham; Sydney Smith, jun., Lowestoft, hon. sec. and treasurer; and the following visitors: Messrs. G. Wake, Dereham; Rattee, Fundenhall; Griffiths, Feltwell.

Letters of apology for absence were read from Sir John M'Fadyean, and Messrs. E. H. Leach, N. Almond, F. L. Gooch, F. T. G. Hobday, Wm. Bower, Philip Turner, J. Cleveland, Jas. F. Thurston, C. C. Nesling, W. E. Livock, E. A. Hudson, H. F. Downe, R. B. Palmer, T. Faithfull Davies, Sydney Smith, sen., D. S. Jack, and A. F. Castle.

The Hon. Sec. presented the minutes of the last meeting, which were taken as read.

Messrs. T. F. Davies and A. Holl were duly elected members.

Mr. Griffiths, of Feltwell, was nominated for membership.

Mr. Morton Wallis asked the support of the members for Mr. and Mrs. George Perrett, of Great Easton, Dunmow, and late of New House Farm, Debden, who seek aid from the Royal Agricultural Benevolent Institution.

The Hon. Sec. read a letter from Mr. Wallace Kerr, of Dereham, resigning his membership on account of the difficulty of attending the meetings.

Mr. Morton Wallis said if all members who were in the same position resigned, there would be none left.

The Hon. Sec. presented the annual report and balance-sheet. The latter showed a balance in hand of £22 13s. The report described the past year as one of misfortune to the Society generally. In the first place they sustained a very great loss by the accident that happened to their President as he was returning home from the meeting on the very day he was elected, twelve months ago, in consequence of which he was unable to attend any of the meetings of the Society during the

year. He had written as follows from his home in Newmarket:—

"Dear Mr. Smith,—I am very sorry that I shall not be able to attend the meeting to-morrow. I am still on crutches and have great trouble in getting about. I hope, however, that you will have a good and profitable meeting and will be able to elect a president who will be of more use to the Society than I have been. Kindly tender my apologies to the members for my unavoidable absence at your meetings during the past year, and yourself accept my best thanks for the trouble you have taken on my behalf."

They, of course, very much regretted the illness of the President and his absence, but they were sure his best wishes were with them. The next misfortune was the summer meeting, which was a fiasco—probably because of the injudicious choice of a place. Sufficient members did not turn up to form a quorum. The autumn meeting was also badly attended—probably because the date was not a suitable one. A great many members who promised to attend did not turn up. Last year he was able to report that every subscription had been paid. This year at the beginning of that meeting three subscriptions were outstanding, but two had since been paid, so that only one remained due. At the last annual meeting Mr. Wm. Hunting read a very instructive paper on "Some Joint Diseases of the Horse," and at the autumn meeting Mr. McTurk sent an interesting paper on "Some Untoward Sequelæ of Parturition in the Mare and Cow."

At the last meeting he (the Hon. Sec.) invited the members to support the International Veterinary Congress, and subsequently he sent out written communications to them, as a result of which over £200 had been promised. He was deeply grateful to the members who responded to his appeal, for the list of names compared very favourably with that of any other Society.

There were four new members of the Eastern Counties Society, and they had lost one by death—Mr. Edward Wright, of Yoxford—to whose relatives a vote of condolence had been sent.

The balance-sheet was a fairly favourable one, although they had contributed ten guineas to the International Veterinary Congress—the first contribution towards a grant of thirty guineas. The balance in hand was only £2 14s. 8d. less than last year.

He had obtained a box and strap for the new shears. During the past year the Society's instruments had been out on 22 occasions, and he appealed to members who made use of them to return them clean—a thing they did not always do.

He appealed to members to pay their subscriptions promptly, as the neglect to do so involved much letter writing. Last year he wrote 419 letters, and that ought not to have been necessary. Another point he had to complain about was the delay in answering his communications, which often involved him in difficulties in making arrangements for meetings.

Election of Officers.

The following members were elected officers for the ensuing year:—

President.—Mr. F. B. O. Taylor, Weston.

Vice-Presidents.—Mr. T. G. Heatley Mr. W. L. Little, and Mr. E. H. Leach were elected.

Committee.—Messrs. Sydney Smith, sen., T. E. Auger, J. K. Gooch, J. Barr, H. P. Standley, and H. Low were re-elected, and Mr. W. Waters was added to their number.

Auditors.—Mr. W. Shipley and Mr. W. M. Reeman were re-elected.

Hon. Sec. and Treas.—Mr. Sidney Smith, jun., was again elected.

Mr. Morton Wallis, Mr. T. G. Heatley, and the Hon. Secretary were elected to represent the Society on the Council of the National Veterinary Association.

Victoria Veterinary Benevolent Fund.

Mr. Shipley said that hitherto the Society had granted two or three guineas to the Fund, but other Societies gave more, and he would be glad if the Eastern Counties Society increased their grant this year. The widows of two veterinary surgeons, who were friends of those present, were receiving benefit from the Fund, without which, he supposed, they would be in the workhouse. Since last January he had had four fresh applications for relief—two from practitioners who through bad luck and ill-health had been thrown on their beam ends, and one from the daughter of a veterinary surgeon and another from a widow. All these wanted help, but the Fund had not got the money to give them. He was certain if only the members of the Society knew the amount of distress the Fund relieved, they would be only too glad to back it up. He wished to thank the members of the profession in the Eastern Counties for the way they had supported the Fund, and he hoped they would give it increased help. He begged of them to give as much money as they could afford, for there was urgent need for it.

Mr. Barcham moved that the Society contribute five guineas this year. They had, he said, a nice balance in hand, and were not likely to require it for anything else.

The Hon. Sec. pointed out that they had two sums of ten guineas each to pay to the Veterinary Congress. After they had cleared that off they could, perhaps, afford to launch out, but meanwhile they ought to be careful.

Mr. Bee seconded the proposition to give five guineas, and it was carried.

The Hon. Sec. reported that although he was elected a delegate to the Royal Sanitary Institute Congress held at York last year he was unable to attend. This year the Congress would be held at Exeter, and it was for that meeting to say whether it was worth while being represented at it. The delegate's fee was one guinea.

After discussion, it was decided not to send a representative this year.

Council Election, R.C.V.S.

The Hon. Sec. said that in previous years they had joined with other Societies and pooled the expenses. The Eastern Counties Society paid £2 4s. a year as their share of the expenses. He proposed that they proceed as in previous years.

Mr. Auger seconded.

The Hon. Sec. announced that Mr. Shipley came up for election on this occasion. He did not know whether there was anything they could do to make his election absolutely certain.

Mr. Shipley said he would be very glad of all the support he could get. One did not go in for an election with the idea of losing. If they felt he represented their opinions on the Council he would be glad of their support and help. It was a bit of a hard tussle for a man to get in on his own.

Inspectorship Fees.

Mr. Shipley raised the question of fees payable to veterinary inspectors under the Contagious Diseases (Animals) Acts in Norfolk, and said the National Veterinary Association were making a serious attempt to raise the fees. The inspectors had held a meeting that afternoon and had decided to form a little Association or Committee so that they might keep more in touch with each other, and that there should be more co-ordination in their action. It was desirable that they should take an early opportunity of appealing to

the County Council to recognise the responsible work inspectors had to carry out for what they considered ridiculously small fees. He felt sure if the County Council understood the matter they would consider an application. The inspectors under the Acts felt they would like the support in this matter of all the veterinary surgeons in Norfolk. A Committee had been appointed, and they would like the President of the Eastern Counties Society to be Chairman year by year. As soon as any definite plan of campaign had been adopted it would be communicated to the Society for approval. In the meantime the inspectors asked all the veterinary surgeons in the county to support them in what they considered to be their just and lawful demands. (Hear, hear).

Mr. BUCKINGHAM thought every veterinary surgeon who was not an inspector should receive a copy of the Acts under which the inspectors worked, and that veterinary surgeons who were not inspectors should receive more than 2/6 for reporting a case of contagious disease.

The CHAIRMAN: I take it you will send out a circular?

Mr. SHIPLEY: Yes.

The CHAIRMAN: Then I think there is nothing further to be done at present.

The HON. SEC said he had been requested by Mr. T. C. Toope, the Secretary of the South Eastern Veterinary Association, to ask the Eastern Counties Society to pass a resolution on the subject of the fees paid to veterinary surgeons for inspecting animals for insurance companies. Mr. Toope wrote, enclosing a scale that had been adopted, and saying that he believed it would be enforced in Kent, or veterinary surgeons would refuse service altogether.

Mr. SHIPLEY thought the subject a very important one, and one that ought to be discussed fully.

Mr. MORTON WALLIS thought the fees named were reasonable. He had been an inspector for one society for a good many years and though their fees were small, yet on special occasions when he had made representations to them they had always met him fairly. He had found that the insurance companies were willing to meet the veterinary surgeons fairly.

The CHAIRMAN said in his opinion the scale of fees issued by the South Eastern Association was quite big enough, because very often veterinary surgeons could fit one job in with another, and if they got 1/- a mile they might make their fees less. Insurance companies did not charge a very high rate, and he did not think they could afford to pay the scale of fees proposed. At the same time he thought the fees ought to be higher than they now were.

Mr. LITTLE said if the fees were greater than the insurance companies could afford to pay, no doubt the insurance companies would put the burden on the insurers.

Mr. BUCKINGHAM thought that in that case there would be more difficulty in recovering the fees.

Mr. LOW said if they made their fees too high it might answer the purpose of the insurance companies to have a veterinary surgeon of their own permanently engaged.

Mr. LITTLE did not think it would be practicable.

Mr. BUCKINGHAM said that even now they employed unqualified men or men who were not registered. He could mention two cases.

On the motion of Mr. Wallis a motion was passed "That the action of the South Eastern Veterinary Association be supported, and that they be requested to refer the matter to the National Association."

It was agreed to hold the next meeting at Ipswich, Mr. A. F. Castle having offered to read a paper on "Sterility."

SPECIMENS AND CASES.

Mr. MCTURK produced a navicular bone from a cart horse showing advanced navicular disease. It was not, he said, very common in cart horses.

Mr. WALLIS mentioned a case of a hound bitch which was run over by a motor car. It was in perfectly good health, and there was apparently nothing the matter with it. There was some stiffness which he considered muscular, but next morning it would not get up. He lifted it up and it walked away perfectly sound. It became worse, and next morning was found dead. A post-mortem showed double intussusception of the bowel. He had seen many cases of single intussusception, and eighteen inches of gut in one case was intussuscepted, and in other cases over one foot. He could not account for the present case in any way unless the intussusception was caused by shock to the system, which seemed to him hardly feasible.

The HON. SEC. said he had had a case of double intussusception in the dog. The small bowel was telescoped into the colon, and the colon was telescoped into itself. The lesion was discovered on making a post-mortem and he could not account for it in any way.

Mr. BUCKINGHAM said the other day a hound pup was brought to him with six inches of bowel sticking out behind. After death he found a double intussusception. He found three or four little pieces of cinder just where the blockage was.

The CHAIRMAN said he had a similar case last year. A pup had a portion of the bowel protruding, and three days afterwards he had another pup out of the same litter which also had an intussusception.

Mr. LOW said he had had two such cases in pigs just lately.

Mr. MCTURK, in reply to Mr. Little, said he had the horse under treatment about three weeks. When he first saw it it was very very lame, and there was history of intermittent lameness as one would have expected. There was distinct drainage in the corner of the heel, the cleft of the frog. He treated it for a week or two but it got no better, so he had the horse destroyed.

SOME UNTOWARD SEQUELÆ OF PARTURITION.

By Mr. MCTURK. [Adjourned discussion].

Mr. MORTON WALLIS said he noticed that Mr. McTurk did not mention giving a sedative after replacing the uterus in mares or cows. He would have thought that was rather an important thing. No doubt it was an oversight on his part.

Mr. LITTLE said he believed in some cases it was necessary to chloroform the animal before the uterus could be returned. If this were done the animal would not strain for some considerable time after.

Mr. MCTURK, in reply: Of course it was necessary to give sedatives. Chloroform came under the same heading. When a mare after foaling was not going on well it was rather a good plan to make an exploration of the uterus, when very frequently something would be found left which would lead to considerable trouble. He had not tried lately clearing the fluid from the uterus with the syphon because he had given up syringing the womb, he found it was a difficult matter to get the fluid removed. When they got this fœtid discharge and water mixed up together it gave rise to just about as much trouble as the pure fœtid matter—if he might use such an expression.

Parturient laminitis he left out of his paper because it was a fairly large subject in itself, and he thought it might lead him on a great deal further than he wanted to go, so far as the length of the paper was concerned. After a difficult foaling he made a practice of having the shoes removed from a mare—if they had not already

been taken off. Then they would be so far ready if anything untoward occurred. With regard to eversion of the rectum after foaling, he saw from the report in *The Veterinary Record* that the discussion rather drifted on to eversion of the rectum in other horses, such as colts. He would have liked to have heard a little more from the members on the eversion of the rectum after parturition. In a certain district where he was once, there were quite a number of cases which he could not fathom at all. They were all fatal but one, and in most cases the rectum was very easily put back and it never came out again. In his paper he tried to explain his theory for the fatal condition—paralysis of the rectum after rupture of the peritoneum and subsequent septicæmia from the necrosed matter.

He did not touch upon eversion of the uterus in sows. On one occasion he came across a sow whose uterus had been everted for about six hours and it looked in a most unhealthy condition. He put the uterus back and put on clamps. They fetched him back in about two hours and said the uterus was out again. He found that the clamp had torn away from one side and that the uterus was out by the side of the clamp. He put it back again and took a bigger bite with the clamp, and the sow eventually did all right—which was rather surprising.

A vote of thanks was passed to Mr. McTurk for his paper, on the motion of the chairman, seconded by Mr. Auger.

Parasitic Mange.

Mr. Shipley spoke of the extreme difficulty of finding the parasite in many cases, and pointed out how unsatisfactory it was to have to certify the disease in the absence of the parasite. He believed there was great scope for the investigation of parasitic mange not only in horses but in other animals also.

The Chairman said after the Act came in force and parasitic mange had to be treated, a stable in the district in which he lived was very soon practically cleared of the disease, although it had been a veritable hot bed of mange for years.

Mr. Morton Wallis said it was advisable in cases of mange to burn or otherwise thoroughly destroy the hair removed from the affected animal. He asked what plan Mr. Shipley adopted in placing the parasite under the microscope? Did he simply place the hair or the scab, or did he treat it with caustic potash, or anything of that sort?

Mr. J. K. Gooch said that the method he adopted in examining scrapings from suspected cases of mange was: He placed the scrapings in a watch glass and covered them with proof spirit, then added a small quantity of water. When the motion set up by the addition of the water had ceased the scrapings were examined under a low power. Then the spirit and water were poured off, and a little dilute Liq. Potassæ added. This rendered any parasites or parts easily visible.

Mr. Turtill mentioned a case in which mange had been conveyed to the people who had been attending to the affected horses. Mange was very contagious and wherever it had existed the whole place, harness and everything, should be disinfected, and there was no better steriliser than the oven. His rule was to bake everything well, and to burn the litter and everything that could be pulled down in the stable. The gates and posts in the fields where the horses rubbed themselves should also be disinfected and McDougall's dip was a good thing to wash them with. In this way the disease might be eradicated.

Mr. Godbolt mentioned a case where a man took mange from a horse.

Mr. Barr asked whether cases of parasitic mange of various kinds had to be reported.

Mr. Shipley referred Mr. Barr to the Parasitic Mange Order, which made the disease notifiable. Mange in the feet and heels was not notifiable, but the other two kinds were. When there was any doubt as to the existence of mange he did not know what to do.

He wrote to the Clerk of the County Council the other day that he suspected mange, but could not prove it, and the Clerk replied that the Order did not apply to suspicion, and that he (Mr. Shipley) must do what he thought best. He admitted that in many cases he would have been glad of better evidence of the disease. In many cases it was impossible to get the parasites bacause they were buried under the skin. Apparently it was possible for the disease to spread to human beings. He did not class parasitic mange with such diseases as foot-and-mouth. It was a disease a man ought to get rid of himself; there was not the danger of spreading that existed with foot-and-mouth, and similar diseases.

A vote of thanks was passed to Mr. Shipley for his paper.

A vote of sympathy was passed with Mr. Wm. Bower, of East Rudham, in his protracted illness.

Sydney Smith, jun., Hon. Sec.

MIDLAND COUNTIES' VETERINARY MEDICAL ASSOCIATION.

The annual meeting was held at the Grand Hotel, Birmingham, on February 14th. Mr W. H. Brooke, of Handsworth took the chair, and there were also present: Messrs. J. J. Burchnall, Barrow-on-Soar; Brennan De Vine, J. Malcolm, L. C. Tipper, and M. Woodward, Birmingham; W. E. Ison, Atherstone; W. S. Carless, H. B. Hiles, Worcester; J. Martin, Wellington; T. Chambers, Dudley; Norman Thompson, Derby; J. A. Gold, Redditch; W. T. Brooks, Warwick; A. Renfrew, Broadway; H. Collett, West Bromwich; P. M. Evershed, Nottingham; Thompson, Stafford; A. B. Forsyth, Cannock; G. Prickett, Walsall; L. W. Heelis, Solihull; and the Hon. Sec. Mr. H. J. Dawes, of West Bromwich.

The visitors present were: Messrs. A. W. Noel Pillers, Liverpool; W. O. Brooke, Handsworth; T. H. Kellett, W. White, and F. E. Heath, Birmingham.

Apologies for unavoidable absence were received from: Sir John M'Fadyean; Sir Stewart Stockman; Professors Macqueen, Penberthy, and Hobday; Dr. H. Manley; Messrs. R. C. Trigger, J. W. Coe, C. E. Dayus, J. R. Carless, H. Thackeray, T. J. Brain, F. W. Garnett, C. Y. Parsons, W. S. Mulvey. E. Ringer, H. S. Reynolds, D. Forwell, S. J. Marriott, F. B. Gresham, T. C. Hutchinson, W. S. Taylor, P. Woolston, T. Abson, W. H. Pickering, C. J. Clifford, W. B. Blunson, T. J. Prince, T. H. Duckworth, R. L. Phillips, John Blakeway, F. H. Gibbings, Jas. Blakeway, sen., T. H. Hobson, F. W. Barling, G. H. Locke, E. O'Neill, W. White, W. Grasby. and others.

Vote of Condolence.

The Chairman referred in sympathetic terms to the loss which the Association had sustained since the last quarterly meeting by the deaths of two old and respected members, namely, Mr. J. M. Parker, of Birmingham, and Mr. W. Reynolds Jermyn, of Clifton. He moved that an expression of the Association's regret be entered upon the minutes of this meeting and also communicated to the relatives of their departed friends.

This was seconded by Mr. Renfrew and carried *sub silentio*.

Nominations: Resignation.

The Hon. Treasurer reported that Mr. W. L. Weighill, of Gloucester, had sent a letter resigning his membership of the Society, and the resignation was accepted with regret.

Mr. W. L. Gascoyne, of Lutterworth, was nominated by the Hon. Sec. on behalf of Mr. T. H. Hobson, for membership of the Society.

Mr. Wm. Trigger, of Newcastle-under-Lyme, was nominated by Mr. J. Malcolm.

Treasurer's Report.

The Treasurer (Mr. J. J. Burchnall) said he had a very satisfactory report to present. They started the year 1912 with a balance in hand of £178 3s. 2d. and had received £54 10s. in subscription and entrance fees, and £3 14s. bank interest, making the total on the assets side £236 7s. 2d.

The chief items of expenditure had been: annual subscription to the Victoria Veterinary Benevolent Fund, £5 5s., first instalment of donation to the International Veterinary Congress Fund, £20, and Hon. Sec.'s disbursements, £19 1s. 6d. The balance in hand at the end of the year was £184 6s. 8d., or an increase of £6 3s. 6d. on the year, notwithstanding the extra item in the expenditure of £20 to the International Veterinary Congress.

On the motion of Mr. Chambers, seconded by Mr. Martin, both of whom congratulated the Society on the sound financial position in which it found itself, the accounts were passed.

Council's Report.

The Hon. Sec. presented a report of the meeting of the Council of the Society, held just previous to this general meeting:—

Mr. W. H. Brooke presided over a meeting of the Council held to-day. There were also present: Messrs. F. L. Gooch, J. A. Gold, H. L. Pemberton, J. J. Burchnall, W. S. Carless, B. DeVine, J. Martin, and the Hon. Sec. (Mr. H. J. Dawes).

In the ordinary course of events, Mr. H. Thackeray, of Stafford, as senior Vice-President, would have been nominated for the Presidency, but he wrote stating that owing to the state of his health he would be unable to hold further office, though he hoped to continue his membership of the Association. Mr. J. Martin, the junior Vice-President, is therefore nominated.

The Hon. Sec. made a statement with reference to the subscriptions to the Guarantee Fund in connection with the forthcoming visit of the International Veterinary Congress to this country, and it was resolved to refer the matter to the general meeting.

The Hon. Sec. reported having received a letter from the Secretary of the Northern Branch of the National Veterinary Association recommending a scale of fees as a basis for negotiation with County Councils and other local authorities under the Contagious Diseases (Animals) Act. The Council advise the Association to adopt this scale.

Mr. Gooch gave notice that at the next meeting he would move the alteration of Rules 8 and 9.

It is recommended that the next quarterly meeting of the Association be held at Wellington, and that miscellaneous papers by members dealing with interesting cases in their own practice be the principal business on the agenda.

On the motion of Mr. Malcolm, seconded by Mr. Gooch, the minutes of the Council meeting were received.

The International Veterinary Congress.

The Hon. Sec. made a statement on the question of the Guarantee Fund. He said that in response to the circular sent out to 100 members he had had replies from 38, whose contributions amounted altogether to £126 17s. 6d. Five members had promised other Associations a sum of £29 14s. He had still to receive replies from about 62 members. The £100 which Mr. Trigger had promised, and the £50 from the funds of the Association made a grand total from the Midlands so far of £276. He earnestly appealed for additional responses: and also read a letter from Mr. Garnett on the subject.

National Benevolent Fund.

The Association were invited to appoint a Life Governor of the Benevolent Branch of the National Veterinary Benevolent and Mutual Defence Association, in succession to the late Mr. William Carless, of Stafford, and upon the motion of Mr. Malcolm, seconded by Mr. Gold, the Hon. Sec. (Mr. H. J. Dawes) was appointed.

Election of Officers.

The President moved that Mr. J. Martin, of Wellington, Salop, be elected President of the Association for the ensuing year. He said Mr. Martin was a very old member and attended the meetings regularly. He also took an interest in their discussions and he was a gentleman who would make a worthy successor to many distinguished members of the profession who had already held the office. Mr. Prickett seconded.

The Hon. Sec., in supporting the motion, mentioned that Mr. Martin was not only popular with his brother veterinarians, but was held in the highest esteem in the town in which he lived, having served the office of Chairman of the Urban District Council in Wellington.

Mr. Chambers, who claimed a close personal acquaintance with Mr. Martin, also supported the motion in complimentary terms, and it was carried unanimously.

Mr. Martin, in reply, said it would be his earnest endeavour to serve the best interests of the Association.

On the motion of Mr. Gooch, seconded by the President, the recommendations of the Council were endorsed:—

Vice-Presidents.—In view of the visit of the International Veterinary Congress to this country next year the Council recommend that the offices of Vice-Presidents on this occasion be filled by two old members whose services to the profession in general, and to this Association in particular, merit this special honour. The names of Mr. R. C. Trigger, senior Vice-President, and Mr. J. Malcolm, junior Vice-President, are recommended.

Other recommendations of the Council are as follows:

Treasurer.—Mr. J. J. Burchnall.

Hon. Sec.—Mr. H. J. Dawes.

Auditors.—Messrs. W. S. Carless and R. C. Trigger.

Members of Council.—Messrs. Gooch, Grasby Wartnaby, R. Over, B. DeVine, Ison, Pemberton, and Heelis, together with the officers of the Association who are *ex-officio* members.

A very hearty vote of thanks was passed to the retiring officials.

The New Milk Bill.

The Hon. Sec. read an extract from a leading article in a recent issue of *The Veterinary Record* on the subject of the new Milk Bill, in which an injustice was threatened to the veterinary profession, and calling for suitable amendments. He thought he ought to bring it before the notice of the Association, as previous experience showed that the veterinary surgeon generally barked when it was too late. He should be very much surprised if veterinary surgeons as a body did not take exception to certain clauses in the Bill. There were three classes of persons to be considered, namely, the medical officer on questions of health, the veterinary surgeon so far as the condition of the animals themselves was concerned, and the Sanitary inspectors, who would

deal with the general sanitary arrangements. The editor of *The Record* pointed out that the status of the veterinary surgeon was not being properly recognised, and it behoved them, therefore, to look after their own interests while there was yet time.

Mr. GOOCH said they must all be indebted to the Hon. Sec. for calling their attention to so important a matter. He moved that the following resolution be sent to the Parliamentary Committee of the Royal College of Veterinary Surgeons with a request to them to take the matter up.

"That in the opinion of this meeting, sanitary authorities should be given power so appoint a veterinary surgeon as a dairy inspector under the the New Milk Bill."

Mr. MALCOLM, in seconding, said it was quite right that the Parliamentary Committee should know the feeling of the profession in regard to this matter. They must all agree that the veterinary surgeon ought to be allowed to take a greater part in the inspection of dairies. If they took no notice of this Bill as it was going through Parliament he thought they would be missing a chance of getting the veterinary profession properly recognised in matters of Public Health. Farmers know that if there was one man in this country who should be a dairy inspector in this country it was the veterinary surgeon. They should use their individual endeavours with the farming world to bring pressure to bear in the right quarter to get the Bill modified.

Mr. CHAMBERS said he hoped the Government would not treat veterinary inspectors under this Bill as they were treated under the Contagious Diseases (Animals) Act, in connection with swine fever. Not that he grudged those gentlemen who had obtained the special appointments, but he thought a hardship was inflicted upon many hard-working practitioners, and that thousands of pounds of public money was thrown away. A veterinary surgeon and a practical sanitary inspector were the men to inspect dairies and cowsheds.

Mr. PRICKETT supported the remarks of the previous speaker. He said there was very little encourgement. given to the general practitioner to-day to report cases.

The PRESIDENT said it seemed difficult to understand how veterinary surgeons could be overlooked, as they were clearly the best men to do the work. They were quite willing to acknowledge the supreme control of the medical officer, especially when any disease in animals was also detrimental to human beings, but as Mr. Dawes had said, they must bark in time if they were going to do any good.

Mr. DEVINE was afraid there was a feeling abroad in that meeting that the Milk Bill should be condemned altogether. They certainly wanted a new Milk Bill and he hoped that would be universally recognised. He quite agreed, however, that the veterinary surgeon should receive proper recognition in respect to the work which he was, above all others, most qualified to do.

Mr. MALCOLM pointed out that as the Bill at present stood, the sanitary authority had no power to appoint a veterinary surgeon to act; that power was in the hands of the medical officer. As a profession they were far from being in opposition to the medical officer in this matter: they wished to support him in every way, but they also wanted their own status adequately recognising.

The HON. SEC. said he too should be very sorry if the idea got abroad that they were antagonistic to the medical officers of health. Such doctors as he knew agreed with him that the veterinary surgeon had a right to be recognised by the State in matters of this kind.

The resolution was then put to the vote and carried unanimously.

THE ROYAL SANITARY INSTITUTE.

The TREASURER (Mr. Burchnall) said he desired to see an unfortunate omission repaired. When they deputed their President to represent the Association at the conference of the Royal Sanitary Sanitary Institute at York last year, no arrangements were made for the payment of his personal expenses. It was always customary to do that, and he now moved that the sum of four guineas be paid to the President to meet his out-of-pocket expenses on that occasion.

This was seconded by Mr. Martin and carried unanimously.

THE METHODS BY WHICH SOME OF THE HIGHER ANIMAL PARASITES PRODUCE THEIR INJURIOUS EFFECTS.

By Mr. A. W. NOEL PILLERS, F.R.C.V.S., F.Z.S.

[The paper was printed in our issue of Feb. 15, pp. 504-507.]

DISCUSSION.

Mr. BRENNAN DEVINE: I should like at first to say that I am proud of having received an invitation to open the discussion on this important paper, and I feel the honour is all the greater by the fact that we have among us to-day many able men whose knowledge of the subject under discussion must far exceed my own. I am sure all of us are grateful to Mr. Pillers for bringing before us such an excellent paper on the subject. I regard a knowledge of the injurious effects caused by the higher animal parasites as of the greatest importance from an economic as well as from a public health point of view.

In discussing a paper of this sort I suppose one is expected to give the various points wherein one differs from the author, but this paper of Mr. Pillers is not open to much adverse criticism, and if I confined my remarks to the opinions in the paper with which I do not agree I should have very little to say. In his opening remarks, the essayist says we have passed the days when ento- and ectozoa were regarded as being beneficial to their hosts. Speaking from the point of view of educated people that is so, but there are remote corners about the country where the inhabitants cling to the old idea that the presence of a tape worm is beneficial to the host. Generally speaking, parasites are harmful and tend to produce pathological changes, but in some cases beneficial effects are apparently produced: for instance, in the early stages of the invasion of the liver fluke (*Distonia hepaticum*) the condition of the host is improved up to a certain point, previous to depreciation setting in. Mr. Pillers, by dividing the paper under the five headings mentioned, has placed the subject in a very concise and clear manner, which enables one to follow him with ease. I notice that the nomenclature used in many cases is not the same as was common in my college days. The essayist has in many cases placed the older name in brackets. For instance, *Cœnurus cerebralis* is a name well known to all of us, but when we read *Multiceps multiceps* we have to pause and think, in order to recognize our old acquaintance *Cœnurus cerebralis* under a new name. Probably there is some good Zoological reason for this, or otherwise a F.Z.S. would not have so named them. I am sure it would interest the members to know the advantage of this re-naming.

Under the heading of injuries caused by the mere presence of the parasites, the essayist mentions the *Linguatula tœnioides* as setting up irritation in the nasal fossæ. I am sorry the essayist has not gone into more detail about this parasite. I have never seen a case of an affected dog; I should like to see one. I shall be glad if Mr. Pillers, when replying will give us a description of the cases he has seen. I have read of cases where the irritation is so pronounced as to cause caries of the bone.

In the next paragraph the writer states that parasites in the lungs of the horse, calf and pig, block the large bronchioles and bring about collapse of that portion of the lung served by that particular air passage. When such an obstruction takes place I do not think it is

entirely due to the mere presence of the parasite, but is partly due to modification which has been brought about in the surrounding tissues by the irritant action of the parasite. There is no doubt that the irritation caused by the parasite sets up an inflammation and congestion, and this of course tends to narrow the lumen of the air passage. The same applies to the syngamus in fowl.

In another paragraph we are introduced to the *Cysticercus cellulosæ*, a parasite which was at one time very prevalent in this country, but now is fortunately very rare. It is here stated that it seems to produce little or no trouble, but I scarcely agree. I admit, of course, that of all the organs the muscles are the most tolerant to parasites, but if we consider the enormous number of cysts found in one host it is difficult to conceive how their mere presence does not render the existence of the host uncomfortable sometimes. Their presence must necessarily cause pressure on the surrounding tissues, and there is reason to suppose that the pressure may in some cases be directly on nerves, so causing direct irritation.

The echinococcus cysts are the most destructive, save the *Cœnurus cerebralis*, of any of the cystic forms that I have met with. The cyst produces great destruction of tissue in whatever organ it is situated. In some cases it does not attain to any very great size, whilst on the other hand it may grow so large as to cause destruction of the whole of the organ in which it is situated, and indirectly it may thus bring about the death of the host. The position of parasites in the alimentary canal may sometimes give rise to serious trouble—bots may so accumulate around the duodenal orifice of the stomach as to cause obstruction, whereas if their position was changed a few inches it would not be so dangerous. I have seen cases in the horse on post mortem in which portions of the bowel were found to be practically filled with the *Ascaris megalocephala*, if these positions were changed and all were accumulated at one portion of the bowel where the lumen is smallest, obstruction might easily be caused. I think we can scarcely pass over the position of the bowels in the alimentary canal as being unimportant.

In the next section of his paper, which deals with the migration of parasites, Mr. Pillers mentions the *Hypodermis bovis;* he, however, omits to mention his theory as to how this parasite arrives at the subcutaneous position it occupies in the backs of cattle. A little later the essayist mentions that farmers should take action against the fly, yet he does not suggest what prophylactic measure he thinks they should adopt in order to effectually get rid of the fly. I think it is rather a pity the essayist has not introduced some practical points in connection with the eradication of these well-known pests. Mr. Pillers' reference to the *Trichinella spiralis* would lead one to think it only causes trouble by migration, whereas Wells, in his Chemical Pathology, states that it unquestionably produces toxic symptoms and that the poison causes cellular degeneration.

The Essayist refers to the arrest of the *Strongylus armatus* at their predilection seats. I have seen several cases of this sexually immature parasite affecting yearling and two-year-old horses, the parasite being found in the lumen of the blood vessels at the junction of the anterior mesenteric artery. I have also seen Thrombosis of the illiac arteries in animals in which the parasite was found in the blood vessels. I have in my mind a case which I saw at a farm in the north some years ago. The animal while alive exhibited the usual symptoms of colic, and was treated for this; on post-mortem examination the bowels appeared normal; death was due to internal hæmorrhage, caused by a rupture of a blood vessel into the abdominal cavity, and round worms were found in the Post Aorta. As regards the *Trichocephalus affinis*, we know that it penetrates to the bottom of the mucous lining of the bowel, and it must necessarily, by its burrowing and attachment, cause irritation and tend to interfere with digestion.

There is no doubt that the *Strongylus tetracanthus* in the horse produces indigestion and general unthriftiness. I suppose under the same category as migration one may include the injury caused by the parasites attaching themselves. There is no doubt that parasites by their movements often cause serious disturbance in the intestines and other viscera. They must by their hooklets and suckers irritate delicate lining membranes and set up catarrhal and inflammatory conditions, proportionate in intensity to the number and activity of the parasites. For instance, take the case of the *Tænia echinococcus* which gambols about the hills and dales on the mucous membrane lining the dog's bowel. On making a post-mortem on a dog, and examining the lining mucous membrane of the bowel on which a family of *Tænia echinococcus* has matured; what do we find? The mucous membrane is loosened and congested, and histologically there are great structural changes: well, we all know that these disadvantageous modifications cannot take place without having a corelative debilitating effect on the constitution. I agree with Mr. Pillers that the damage to the host under this heading of migration is a most important one, and that the indirect injury caused is often more harmful than the direct. To illustrate what I mean by indirect injury—in the case of the mange parasite the indirect injury is caused by the animal biting itself and rubbing against sharp projections.

In the next section of the paper Mr. Pillers deals with the injury caused by parasites feeding on tissues and juices of their hosts, there is no doubt that when you get a number of parasites which feed on the digesting food there must be a not inconsiderable loss of food to the host. It will of course be difficult to demonstrate how much of the loss of condition in an animal is due to irritations caused by the migration and attachment of parasites and how much to the loss of ingesta aborbed by the parasite. In the case of "wasters" in cattle due to Strongyles in the fourth stomach it is difficult to determine exactly what brings about the great loss of condition.

I scarcely think that the amount of food or chymous matter which parasite in the alimentary canal absorb sufficiently accounts for the great loss of tissue which is seen in affected animals.

There is no doubt that some animals possess a certain tolerance for particular parasites, because we often find on post-mortem numerous parasites in the bowels of horses and cattle, but when this tolerance is overcome as it is quickly in the case of young animals, such as lambs, affected with *Moniegia Expansa*, the parasites then become a great source of trouble, causing wasting, anæmia, and other unfavourable symptoms. The question arises then, what is the direct cause of these symptoms? Are they due to impaired digestion caused by the migration and attachment of the parasite, or is it brought about by the loss or blood or chymous matter?

As regards toxins produced by the higher parasites, I think it is generally understood that mange parasites produce a toxin which acts detrimentally on the skin in the same way as the blow fly acts on the sheep. The latter excretes a substance which tends to melt the meat and then it feeds on the juice thus formed. Indirect toxæmia may occur through auto-intoxication; parasites may so wound the bowel as to expose blood vessels, and you may then get absorption into the blood of harmful matter from the fæces.

Mr. Pillers refers to "eosinophilia." Nowadays, most authorities agree that eosinophilia is due to the action of soluble products or constituents of parasites. Cala-

mida found that extract of tape worms from a dog when placed in the tissues caused an accumulation of eosinophiles at that part.

Mr. Pillers mentions a case of a young pig affected with convulsions in which he found only three nematodes on post-mortem. It would be interesting and instructive to definitely know if the convulsions were due to either toxæmia or to irritation alone. I am rather partial to the irritation theory. We know that the sight of food stimulates the gastric and intestinal glands, and the secretion from these glands may cause active movement among the ascaries, and these movements cause irritation sufficient to produce convulsion. A little further on the Essayist mentions liver rot in sheep and suggests that the anæmia caused is due to toxæmia. I believe it is due to the want of liver substance. The liver we know has a multitude of other functions other than the production of bile. In fluke disease the liver structure is gradually destroyed, and consequently the internal secretions which the liver forms are reduced in quantity, and this I think would sufficiently explain the anæmia which is so marked a symptom in distomatosis. The fluid in the cysts which form part of the life cycle of cestodes possesses in every case toxic properties. The toxic extracts recovered from cestodes themselves have in most cases been found to be hæmolytic. James and Mandone found the extracts of tænia bactericidal. Sorcosporidia Tenella of sheep (*Balbiana gigantea*) are highly toxic for rabbits, the toxin in this case being name dsarcocystin. In this most interesting section of the paper relating to toxins I had hopes that Mr. Pillers would give us something new on the subject, as our present knowledge is in a very unsatisfactory and fragmentary state. It is difficult to assume what degree of virulence is possessed by toxins elaborated by parasites in the alimentary tract, and as far as I can ascertain the toxic products of the higher animal parasites are not well defined from a chemical point of view, in fact there is at present a large untilled field waiting for some enthusiastic active research workers.

In the final section of his paper the Essayist deals with the injury due to the transmission of disease-producing organisms by the parasite. Since it has become known how malaria, sleeping sickness, tsetse fly disease, are spread, the subject of parasitology, as the Essayist points out, is more important than ever, but before scientists had acquired a true knowledge of the methods by which these diseases were spread, practical veterinarians held the view that several diseases of domestic animals, e.g. "redwater" in cattle and "looping-ill" of sheep were spread through the agency of ticks. We now know for certain that redwater is thus spread. Any advance made in our knowledge of the spread of swine fever will be hailed by all of us. Knowing what ticks, fleas, and flies are capable of doing in the spread of disease, it will be no stretch of the imagination on our part to admit the possibility of hæmatopinus suis carrying the ultra microscopic organism which causes swine fever.

Before concluding, I wish again to thank Mr. Pillers for bringing this paper before the Association. The trend of medical science at the present day is towards prophylactic or preventive measures, and I think it is a pity the essayist has not touched on this in his paper. Perhaps he will do so in his reply.

Mr. Gooch said a paper like that they had had from Mr. Pillers only created a desire for further knowledge. He had to look back into his dictionary again to find many of the words that were used, and at any rate one result of that was to increase one's knowledge of nomenclature. He differed from the essayist on one or two small points. For instance, he said that large numbers of adult worms blocked many of the larger bronchioles in the horse, calf and pig, and by their mere presence gave rise to collapse of the lung tissue supplied by that vessel. He (Mr. Gooch) would have agreed with him better if he had said that the smaller instead of the larger bronchioles became blocked. The Essayist had not mentioned such a case as migration to the testicle, which was not, be believed, an uncommon experience. With regard to the *Strongylus tetracanthus*, he thought it caused more deaths in young horses than any other disease that they had. It was not unusual, where the disease was prevalent, to have six or seven deaths when 20 or 30 young cart horses were running together. With reference to the case of convulsions mentioned by Mr. Pillers in a pig affected with ascaris, he had himself met with the same condition in a cat. He was inclined to think the more delicate breed of cats, Persians for instance, which were in-bred, were liable to it. With regard to redwater, when he was a young man it was such a common thing that they used to keep medicine ready made up. With improved sanitary conditions they did not get so much of it nowadays. It generally appeared in a poor man's cow, where he was not able to keep it properly. Mr. Pillers expressed the belief that the list of diseases spread by flies and ticks would probably be augmented, but it was to be hoped that a good many existing diseases would be entirely eradicated by means of improved sanitary conditions and the knowledge acquired by the study of bacteriology.

Mr. Renfrew said he had read the paper with very great interest and had also listened to Mr. DeVine's masterly criticism of it with much enjoyment. With reference to some of the round worms, and particularly in the bronchioles of the calf and the pig, there was no doubt that suffocation was due to the literal packing of the worms themselves. He had seen quite a rope of them removed. As to Mr. DeVine's complaint that the essayist had not gone into greater detail in some of the subjects, they ought to remember what a vast field for speculation parasitology was. For his part, he considered that Mr. Pillers had summarised the subject in a most admirable manner. With Mr. Gooch, he knew of nothing more troublesome in country districts, especially in the late autumn or early spring, than the trouble due to worms in the bowels of young horses, and if there was a specific for their cure he would like to hear of it. Any parasitic trouble was bad enough, but worse of all was the *strongylus tetracanthus*. He used to have a few cases of red-water every month, but he had not seen anything of it for over a year.

Mr. Gold said he was very interested in that part of the paper that referred to the *Hypoderma bovis*. He would like to know how that parasite got to its natural habitat. In his own district he had had a lot of trouble with *Tænia*. He had no contribution to make to the discussion, but he was anxious to derive as much information as he could.

Mr. Malcolm said they must all appreciate very highly the fact that Mr. Pillers had come all the way from Liverpool to give them that paper because he was an authority on the subject. It was a very suggestive paper in many ways, and it reminded them that very often parasites might be present when they were looking for something altogether different. One lesson which the paper taught them, therefore, was to be observant, and if possible a collector of parasites. He would like to have heard a little more about mange.

The President said he had not heard any reference to worms in puppies. It was a common thing to get puppies two or three months old affected with worms. They even got them before they had taken anything but their mother's milk, showing that there was only the mother through whom they could get the worms. He would like to hear how it was transferred from the mother to the puppy. Nor did he think anyone had spoken of worms being responsible for disarrangement

of the bowels. He had made a lot of post-mortems and he did not think he was exaggerating when he said he had never known a case of twisted bowel without worms being associated with it. With regard to the alteration in nomenclature, was it because there had been any alteration in the zoological department?

REPLY.

Mr. PILLERS, whilst thanking the Association for inviting him down, said that he must also censure them for not having been a little more definite in saying what they wanted. Upon almost every parasite that he had mentioned in his paper he could have given them enough to make them tired. Mr. DeVine and Mr. Gooch were quite justified in their remarks that the paper was incomplete, and that information was scanty in regard to various parts of it. He had derived most of the paper from his lecture notes, and he purposely made those notes scrappy and disjointed to make people think for themselves. He must particularly thank Mr. DeVine for opening the discussion in the way he had done, because it was disheartening to hear a man say he agreed with everything in the paper. Mr. DeVine had said that the inhabitants in some parts of the country still thought that parasites were a good thing. When he (Mr. Pillers) mentioned that we had long passed the era of thinking parasites had any value, he was referring to veterinary surgeons and those who had some scientific knowledge. Mr. DeVine said, too, that parasites might be good at first, but that might be said of other things. They should, however, judge a parasite by the sum total, and if they did that there was not much to be said in their favour. Take the house fly, they might say that it did good. So it did to some extent, because it was direct evidence that there was some filth where it was breeding, but anything it did after that was injurious. Lice did good, they told people that the head was dirty, but the sum total of their influence was bad. With regard to the altered nomenclature which had concerned some of the speakers, where there had been any change he had put the old term in brackets directly after. In naming an organism, it was understood that the name it first received should have priority over any other. If there had been a misdetermination, one of the names had to fall. Then, again, they had been given to understand that there were two worms affecting horses, the *Strongylus armatus* and the *Strongylus tetracanthus*, the large and the small, but there were three different species of the large worm and about 18 different species of the other in different genera, and so fresh names had to be employed to distinguish one from the other. Mr. DeVine especially mentioned the use of the name *Multiceps multiceps*. If they called an oak tree by a Latin name, when adult they would not give a different name to the acorn, and the name *Multiceps multiceps* was given to this particular parasite on the ground of priority. As to the way in which he had grouped the injurious effects which parasites produced, he agreed that it was possible to put a case under more than the one heading, but the system he had adopted seemed to him to be the more convenient. With regard to the lung trouble caused by worms, Mr. DeVine held that the irritant action of the parasite was as much a cause as the mere presence of the worms in the bronchioles, that was true, but in that connection there was the interesting testimony of Mr. Renfrew that the worms could be pulled out in ropes. One of the best cases he could quote was that of a donkey affected with *Dictyocaulus arnfieldi*, in which the parasites were so blocked that he questioned if he could put a pencil between the mass and bronchial wall. Mr. DeVine had alluded to the effect which *Cysticercus cellulosae* produced in the pig. Of course it must have some effect. If it came at the end of the nerve terminal, said Mr. DeVine, it would cause pain. He (Mr. Pillers) could have enlarged greatly on that subject. He could also have devoted a paper to the subject of *Hypoderma bovis* about which Mr. Gold was anxious to have more details. The history and economic aspect of the subject were most interesting, but he was afraid he would have to content himself with a very slight reference to it. There was some doubt about the life history of this parasite. The fly deposited its eggs on the skin, and then the question arose as to what happened to the eggs. The evidence was that it was taken into the system by the cow's tongue when licking, and it then bored to its seat underneath the back. Mr. DeVine said that for some years he had not seen the *Strongylus vulgaris* and other worms, but because one could not see them it did not say they were not there; they were probably visible through the microscope. Mr. DeVine seriously disagreed with what he had said about the *Lucilia sericata*. He was not describing the stages in which the mischief was done, but when they saw a great hole in the sheep after a few days he thought his explanation was a reasonable one. As to the connection between swine fever and lice, it was feasible, but there was one thing about lice, and that was they could not transmit it a great deal, because they were more or less localised. There was not much transmission from one animal to another, except when they happened to rub against each other on the same premises.

He regretted that time had not permitted his going into the practical side of it more fully and to have dealt with prophylactic measures. He might have devoted some time to the prophylactic side of the question if he had taken one parasite only, but as he had covered such a wide field he had not been able to do so. With regard to *Strongylus* in the testicle, here again was a subject that would lend itself to much more exhaustive treatment than he had been able to give it in the short time at his disposal. He agreed that the treatment of *Strongylus* in the horse was very unsatisfactory. When they discovered the presence of the worm in the animal the damage was done. They must then try to prevent others getting back again. It was of the highest importance to know something of the character of these parasites, or else preventive work, which was what they wanted most of all, was not likely to be very effective.

Mr. Pillers proceeded to answer a number of other questions that were raised in the discussion, and especially dealt with mange, its treatment and diagnosis, but requested that his remarks on this subject should for the present go unreported.

THE ANNUAL DINNER.

The company then adjourned to another room where the annual dinner was served, Mr. Brooke again presiding. Owing to the lateness of the hour the toast list had to be considerably curtailed, but the Chairman said that however pressed they were for time, no body of veterinary surgeons would allow the toast of "The King" to pass unhonoured.

The toast was drunk with all loyalty.

Mr. PILLERS proposed "The Midland Counties' Veterinary Association." He said it was recognised that this Association had done a great deal of good for the profession during its long existence, and he hoped that under the new National scheme its power for good would be even greater. He was glad to see they were getting a lot of young men to join the Association, for it must be a satisfaction to those who were now bearing the heat and burden of the day to know that when they laid down their task it would be carried on by others as zealous and enthusiastic as they were themselves. He thought that a single entrance fee would be an encouragement to men to join, by which he meant that a man who had already paid an entrance fee to another Association should be admitted to this Association without paying a further entrance fee, and vice versâ.

He coupled with the toast the names of the President and the Hon. Sec.

The PRESIDENT, in reply, said one of their objects was to improve the social status of the profession generally, but that lay more with the individual than with an Association. He thought they had been apathetic too long, but he was glad to notice signs that the veterinary surgeon would be given his proper place in the scientific world.

The HON. SEC., after first acknowledging some kind personal references to himself by the proposer of the toast, said the Midland Association claimed to be second only to the Central Society in point of numbers, and second to none in point of influence. They generally managed to make a good choice in the matter of their presidents. None would deny that in Mr. Brooke they had found just the man for the position, and he was pleased to think that in their old friend, Mr. Martin, of Wellington, they had a most worthy successor. As far as he was concerned, he fulfilled his secretarial duties with a great amount of pleasure, because he had never received anything but kindness and consideration, not only from the other officers of the Association but from the members generally. With regard to affiliation, he thought so far as the different branches of the National were concerned in order to make affiliation a success, the meetings ought to be held in different parts of the various districts, and he had suggested as much. He had reason to believe that the next meeting of the Northern Branch National would be held at Birmingham.

Mr. MALCOLM proposed "The Visitors." He said they were always pleased at the Midland Association to have visitors amongst them, and he could always promise them a hearty welcome.

Mr. PILLERS responded, and incidentally mentioned, as Secretary of the Northern Branch of the National Association, that he believed in the principle of holding meetings in different parts of the district. It was a means of stimulating local interest, and unless they secured the support of the rank and file of the profession they could not hope to succeed.

SPECIMENS.

Mr. PILLERS, after dinner, exhibited a number of mange parasites, and also material for diagnosis. He received the hearty thanks of the Ascociation for all the trouble he had been to that day.

H. J. DAWES, F.R.C.V.S., Hon. Sec.

LANCASHIRE VETERINARY MEDICAL ASSOCIATION.

The fifty-first annual meeting was held at the Grand Hotel, Manchester, on Saturday, February 15th. The President, G. H. Locke, Esq., in the chair.

The minutes of the last annual meeting were taken as read, on the proposal of Mr. Wolstenholme, seconded by Mr. Wright.

Nominations.—Mr. K. J. S. DOWLAND, Board of Agriculture, was nominated for membership by Mr. Noel Pillers. Mr. Pillers said that in endeavouring to get young men to join the Association he had met with the objection that many of them are moved about the country and therefore would have to pay entrance fees to several different associations. It appeared desirable, he thought, that some arrangement should be made whereby this could be obviated and one entrance fee suffice.

The PRESIDENT pointed out that one of the Rules of the Association allows a new member, who is already a member of another society, to join without entrance fee.

It was decided to refer the matter to the Council.

Correspondence.—The Secretary read a letter from Sir Stewart Stockman appealing to the Association to complete a list of promises of subscription towards the International Congress. Also stating that the promises so far made have been from only 200 out of the 2,000 members of the profession.

From Mr. Garnett was also an appeal to the members of the Association for subscriptions towards the International Congress.

Mr. STENT stated that the sum of £5 5s. for three years has been advised to be paid by the Society. He thought the present applications were directed to individual members.

The PRESIDENT suggested that the Council might draw up a scheme to approach members.

Mr. SUMNER proposed, and Mr. Carter seconded, that the Council consider the question, and report.

From the National Veterinary Association, with a suggested scale of fees and allowances payable to veterinary inspectors. This also was referred to the Council, the Secretary stating that there would thus be time to put each member in possession of all the literature prior to the next meeting.

From Mr. Carter which expressed his great appreciation of the honour conferred upon him by the members of the Lancashire V.M.A. in again nominating him as a candidate at the next election of Council of the R.C.V.S.

BALANCE SHEET.

Mr. STENT, hon. treas., first apologised for not having had it printed and circulated to members as hitherto. It was proposed to publish it in a small handbook containing their rules, list of members, and other matter, and that had caused some delay. It was expected to be issued in a week or so. He read out the items of receipts and payments, and declared a balance of £26 8s. 1d. Nine new members had been elected during the year, three old members had rejoined, one had resigned, and four names had been removed for non-payment of subscriptions. The membership was now 87 against 80 last year.

Mr. TAYLOR, as one of the auditors, moved that the balance sheet be received and adopted.

Mr. PACKMAN seconded, and it was carried.

PRESIDENTIAL ADDRESS

Mr. G. H. LOCKE, M.R.C.V.S., Manchester.

Gentlemen,—May I commence by thanking you most sincerely for the honour you have done me in electing me President of this well known Association. I accept the position with considerable diffidence knowing well my shortcomings to fill the post and follow in the steps of the men of prominence, who have occupied the office before me; still it will ever be my sincere desire, in the future as in the past, to further the interests of the Association during my year of office, and to keep it up to the high standard of efficiency it still holds in the profession. At the same time, may I look for your hearty co-operation and support during the year, and express the hope that by your presence and interest at our quarterly meetings, my period of office will pass pleasantly and advantageously to all of us.

I propose to say a word or two on recent events that have taken place in the veterinary world, and first would allude to the two cases of recognition that our profession has had bestowed upon it. I refer to the Knighthood conferred on Mr Stewart Stockman, of the Board of Agriculture, a well merited honour by a well tried Government servant, and through him, we are pleased to hope, our profession. These honours are so few and far between that we are naturally delighted when the veterinarian is in any way noticed. I am sure you all join me in offering our heartiest congratulations to Sir Stewart.

A second case is the acknowledgment which has

emanated from the powers that be, by appointing a Commission to enquire into the requirements of the Public Services with regard to the employment of Veterinary Officers. I myself think that much good will come to us as a result of that Commission. It opens up new branches of service, and is gratifying if only from the fact that we are to be recognised in our proper sphere; it is a move in the right direction, and, personally, I think we ought to be pleased with their report. We must do all in our power to keep our respective Members of Parliament stirred up, so as not to allow the report to be "shelved"—as has been the fate of many before it—and agitate until we get our proper rights as a profession.

This brings me to mention the great transformation that has taken place in the reorganised National Veterinary Association by the amalgamation of practically the whole of the Veterinary Medical Associations. I am sure the N.V.A., if run on proper lines and truly supported, not only by the branches and divisions but by individual members, ought to be of great benefit to us all. We have lacked in the past an Association to look to to bring forward points, shall I say of commercial interests to us as practitioners, and put forward the views of the general practitioners in the proper quarter. From what I have already experienced as one of your representatives on the Council of the N.V.A. I am sure that the reorganised "National" will become a power in the land.

As you are already aware, we are to be honoured by a visit from our International Colleagues in 1914, and I should like to emphasise the necessity for us all to do our utmost to make their visit a very happy and profitable one. This will call for some sacrifice by our members, as unfortunately we are not in so happy a position as our Continental friends, who receive State grants for all their schools, and pecuniary assistance when the Congress is held in their several countries, therefore the onus falls upon us to subscribe the necessary funds to entertain our visitors. May I appeal to you gentlemen to give the Congress every help by subscribing as liberally as you can, and so keep up the reputation of Lancashire. Having had the pleasure of being one of your delegates at an International Congress at Baden-Baden, I cannot speak too highly of the good fellowship and hospitality extended to us as visitors on that occasion, and I am anxious to do all in my power in returning their kindness, which I can assure you is still a pleasant memory.

Before closing I should like to take this opportunity to bring before those who are not already members, the great benefits that are gained by joining the National Veterinary Benevolent and Mutual Defence Society. One never knows when a fractious client may turn up, and although, fortunately, assistance to defend is not very often required by any individual member, it is very consoling to know that one is, also at the same time subscribing to relieve the wants of some more unfortunate brother or sister.

I thank you once more for the honour conferred on me and for your kind attention to these remarks.

Mr. CARTER proposed a hearty vote of thanks to the President for his address.

Mr. WRIGHT seconded, and Mr. Packman supported. This was carried with acclamation.

On the proposition of the Secretary, seconded by Mr. Sumner, a telegram was sent from the Association assembled to Sir Stewart Stockman congratulating him on his honour.

THE DINNER.

For the first time ladies were invited and were present in goodly numbers. The attendance of members included the President, Messrs. Stent, Taylor, Woods, Carter, Noel Pillers, Sumner, Wilson, Wright, Spreull, Priestner, Abson, Wolstenholme, Packman, Noar, McKinna, Lawson, Turner, Clarkson, Munro, and Brittlebank.

Amongst the visitors were: Sir Alfred Hopkinson, Manchester University; Aldermen Bowes, Dixon, and Turnbull; Councillors Bowie, Kay, and Jones, of the Manchester City Council; Dr. Serjeant, Dr. Sutherland, Dr. Cryer, and Mrs. Cryer, Dr. and Mrs. Wolstenholme, Mr. Taylor, jun. and wife, Mrs. Lawson, Miss Taylor, Mrs. Wolstenholme, Mrs. Priestner, Mrs. Stent, Mrs. Kay, Mr. and Mrs. Crompton, Mr. and Mrs. Worship, Mr. W. Stott, Mr. and Mrs. Haughton, Mr. and Mrs. Cantrell, Mr. W. Locke, and Mr. Greenup.

Apologies for absence were received from Messrs. Hughes, Share-Jones, Lloyd, Heyes, Garnett, Fletcher, and Wharam.

The PRESIDENT gave the toast "The King," which was acclaimed with musical honours.

The PRESIDENT gave "The Queen, Queen Alexandra, and the other members of the Royal Family." This toast was also loyally responded to.

Mr. SUMNER gave "The City of Manchester." He took no responsibility for having the honour of the toast given to him, a toast of great importance, and one which if properly prepared, would have to be very comprehensive. As they knew he came from Liverpool, between which city and Manchester there was antagonism, not necessarily bitter, but he believed friendly antagonism. Although they were opponents, he claimed that Liverpool and Manchester men are essentially brothers and friends, Manchester naturally appealed to all of them as being a most important city. Important for her wealth, noted for noble buildings, which in turn are noted for their black places, noted for the spinning of "yarns." Coming by train from Liverpool they were reminded all along the line about Manchester goods being for Manchester Docks, and he wondered whether the time would come when, as a result of the waterway which connects Manchester with the coast, they in Liverpool would have to close their doors and say their docks were no longer necessary. It has been proved, however, that there is room for all. He believed Manchester is quite happy in the results of her waterway, to which Liverpool subscribed nobly. Liverpool has a constant reminder of the presence of Manchester, especially in the upper reaches of the Mersey, and they felt sure the waterway did a good deal towards cleansing Manchester of something which it was ready to give away. However, they were glad to abide as close friends, and notwithstanding the Ship Canal they were still building docks in Liverpool and were considering how best to cope with the congested amount of goods in their docks.

They admired Manchester for many things and especially in her relationship with the veterinary profession. They admired her for the great care taken in safeguarding the health of her citizens. They wanted her to do still more. They wanted her to set up a standard in relation to the slaughter of animals in regard to their food value. To do something which has not been done—to standardise what shall be known as meat inspection. Meat inspection is a large matter and surely it will be a larger matter. At present there is no uniform scale. Manchester is well served in her meat inspection, but there are municipalities that are lax in what they consider the minimum of safety of the public health. Some are more strict than others, and the butcher is the man who generally finds out these particular qualities. He would like to see Manchester tackle this question of the proper accommodation for the slaughter of animals and set up a standard which would be recognised. The subject is an old one, but is serious, and looming large in Liverpool.

In matters professional Manchester has followed

Liverpool's lead and, he hoped, with some satisfaction. Liverpool became interested a few years ago in veterinary education and arranged a post graduate course with diploma. The Manchester University subsequently adopted it. He hoped the question of going more fully into the subject of meat inspection and abattoir accommodation would be considered.

Mr. Councillor THEWLIS, responding, expressed great pleasure in having the opportunity of saying a few words on such an occasion to a profession which is so important and valuable to the community. He was glad to have accepted their hospitality, not only for his own sake but because of the regard which he had for the President and the President's late father. He felt in a difficult position in replying to Mr. Sumner, but he thanked him for the kindly spirit in which the toast had been proposed. So far as Manchester was concerned they recognised that the Ship Canal was one of the most wonderful events in their history, and productive of a degree of prosperity the like of which had not been seen before. There were many things to be thankful for in connection with the Ship Canal, and although it had not been possible to pay dividends to the investors he believed there was not one single thoughtful man or woman in Manchester who would say that the Canal should not have been made.

So far as Liverpool is concerned, he had not heard of it being criticised on any festive occasion, because in Manchester their hearts were so full of sympathy, and with that breadth of view Manchester people were credited with, they were glad to take a lesson if Liverpool was doing something better than Manchester. Only the other day an important leaf was taken from Liverpool's book in regard to the admission of children to picture palaces late at night. He was able to tell a deputation to the Watch Committee, who were opposing the adoption of such proposals, that they had been in operation in Liverpool for some years with remarkable effect. Municipalities learned from each other, and by so doing had produced in this country a system of local government which, to his mind, was the glory of the country to which they were all proud to belong. Those who spent most of their time in local government felt very strongly that municipal associations have contributed in the largest degree of all to the greatness of the country.

He had not an intimate knowledge of veterinary work, but in connection with his function as a magistrate he had to adjudicate in cases where owners were proceeded against for working horses whilst in an unfit state. He had been struck with the absolute fairness of the veterinary surgeons who had been employed to defend such owners. The profession is of far more value than most persons think. A vast amount of work was done in addition to treating horses and cattle: a good deal was done in the examination of food, and he was glad to know that so far as Manchester is concerned, whatever Liverpool may do, they did a great deal. He did not boast about Manchester, but only talked of facts. The Sanitary Committee did a great deal of work, and great attention had been paid by them to the milk supply, still the whole ground was not covered, and he held that in all big cities they should see to it that the whole of the milk supply is guaranteed to be pure.

He again expressed pleasure at being present and meeting many whom he had met before in other walks of life, and he hoped that the serious problems they were cognisant of and took deep interest in would still be grappled with as in the past.

Alderman TURNBULL also responded. He was more than pleased to be present, and he congratulated Mr. Locke on his proud position as President of one of the most important Associations there is in the United Kingdom. He knew no man more devoted to his work. It was also his privilege to know Mr. Locke's family. He was a believer in free trade in most things in connection with the commerce and industries of this country, but at the same time he was an advocate of tariff reform so far as the veterinary profession was concerned, and he wanted to throw out a hint to them. He thought that when they were competing for the business of various municipalities there ought to be an understanding amongst the profession regarding their charges. He was on several large committees that had to deal with contracts for veterinary work, and he was afraid the profession did not adopt either the policy of "free trade" or of "tarift reform." There should be an understanding amongst themselves, for they ought to get a price which would be fairly remunerative for the services rendered. He devoted six and sometimes seven days a week to public service and was in close touch with the veterinary inspectors of the City. As a member of the Sanitary Committee, he had come into daily contact with Mr. Brittlebank's work for something like nine years and owing to his efforts the milk supply of Manchester is the best and purest there is in the United Kingdom. No man had done better work in this respect.

He wished to say that there is a kindly feeling between Liverpool and Manchester. They were practically one community and whenever prosperity of one city takes place prosperity in the other is bound to follow.

Mr. W. A. TAYLOR rose to propose "The President," and said: The only qualification for the toast I possess that I am aware of, and that I was unaware of until a very few days ago, and that is that I happen to be the father of this Association. I must politely intimate to the members of the fair sex present that I am not responsible for the actions of all my sons. I said I was the father of the Association, but father only by accident of circumstance in being the oldest living member of it. This Society, as most of you will have noticed in reading the title page of the menu card, is celebrating its fifty-first anniversary. I have known this Association for fifty-five years, and I have had the privilege of personal knowledge of every President. When a lad in my teens attending the old Owen's College, and studying chemistry under Sir Henry Roscoe, who is still alive and flourishing, I used to come with my old dad to the meetings, and proud I was to be the son of my father. Our profession itself is only 69 years old—one year short of the allotted span of man's life. Only in the year 1844 were we in receipt of the Charter of Incorporation from her late Majesty Queen Victoria, so that our profession is quite a young one. Recently, as members of it are aware, agitation has occurred in the high ranks of our representatives in Parliament, and a Departmental Committee was formed to enquire into the present state of the infant—veterinary science. It is not my duty to refer to that matter, but to-night we are glad of the presence of the President of that Departmental Committee, and I should like to assure him that though I do not know what my brothers' views are with regard to the suggestions of the Committee, I, personally, look upon them with favour. I do so for many reasons, but I will only mention one, and that is I desire to remind him that our profession is young, that our profession practically reared itself. It had to provide funds for the education of its students, and the most of our teaching colleges were private institutions. The Government did not support the poor veterinary surgeons as it might have done. We will let bygones be bygones, but I can assure Sir Alfred Hopkinson that what our profession is most in need of, after education of course, is that stuff one's grandfather used to say made the mare to go—money. If the State will aid the profession I think that they will find a response on behalf of the profession—an increase in the number of young men presenting themselves for graduation in our profession, and it will

follow, I think, that the scholarships, if instituted, will be an additional incentive in finding men required for the most important positions. This in passing.

Our forefathers knew the value and the power of union, and when this Association was formed fifty-one years ago it was formed with the idea of advancing, first of all the value of the profession, and secondly its interests. Looking over the long roll of Presidents of this Association, the name that stands out most prominently to-night is that of Locke. I remember the time, and doubtless those members of our City Council who are present to-night remember the time when the Chief Meat Inspector of the City of Manchester was a butcher. A very good man as a butcher. At that time our old friend Mr. Sam Locke became a member of the City Council and through his instigation, backed up by the efforts of this Association, the Markets Committee were prevailed upon to try a veterinary surgeon as meat inspector. Fortunately the man secured was a good man. I refer to the late Mr. King. What do we see to-day? In that day there was one inspector, to-day there is a chief and four assistant inspectors, and I can assure you they are all alert and all extremely keen. That is as it should be. I need not, after the remarks that fell from such able speakers as Councillor Thewlis and Alderman Turnbull, allude to the assistance given to the Medical Officer of Health of this City by our friend and ex-president, J. W. Brittlebank. His work is well known, he has been a much criticised man, and in certain callings of life, a much abused man. He steers his course straight, without fear or favour, and has the ability necessary to perform his duties. Therefore Manchester is not neglected, I think, in the way of food inspection.

Now I must ask you, and particularly the members of the Association, to consider our present President—Mr. Harry Locke. For fifteen years he has acted as honorary secretary of this Association. Fifteen years is a large slice in the lifetime of a man. They have been years of labour and, I believe, the labour of love. The members of the Association appreciate most highly his endeavours to fulfil the duties of the office which he so ably held. I ask members, and those who are not members, to grant what a President most looks for and most feels—the hearty support and co-operation of the members of the Association over which he presides. Let him see, by our attendance and by our efforts to increase the interest in the Association, that we appreciate what he has done and that we look forward to the future with confidence in him. Actions, it is said, speak louder than words. I believe it. But I am constrained to say that if for fifteen years Mr. Locke had been talking instead of working I am afraid he would have gone over to the body of suffragists. Fortunately for the existence of the Association he did not do so.

I have one other duty to perform before I resume my seat. It is on behalf of members of this Association to ask Mr. Locke to kindly consent to accept this silver tray as a slight token of our great personal regard for him, and (addressing Mr. Locke) I ask you, Sir, to take it as an expression of our best wishes to you, to Mrs. Locke and family in the near and distant future.

Mr. Taylor then handed the silver tray to Mr. Locke, and this toast was drunk with musical honours.

The PRESIDENT said that what little speech he had ready had been knocked out of his head by the totally unexpected presentation that had just been made to him. As they knew, he had occupied the position of secretary for fifteen years, and he was thankful to have enjoyed such good health as only to miss two meetings during that time. He wished to thank them for the kindly manner in which they had referred to his late father, and also for the personal compliments. History was said to repeat itself, and strange to say his father when President of the Association in 1885 was presented by the members with a cabinet in recognition of his services as secretary. That present is still in the family and is treasured. His secretaryship had been a labour of love, and how the time had passed he scarcely knew. Obviously speaking with some feelings of emotion Mr. Locke again expressed thanks on behalf of his wife and himself for the handsome present which they would always cherish.

Mr. WOODS, proposing "The Visitors," took exception to the word "visitor" as not conveying the warm and kindly feelings he wished to express. The word was so comprehensive (and he instanced types of visitors who were not welcome), he would prefer to use the term "Our Guests," as guests are always welcome. On behalf of the Association he said they felt honoured by the number of invited guests who had attended the dinner, and amongst them there was none they received with greater pleasure than Sir Alfred Hopkinson. He recalled having attended a class of Sir Alfred's for Latin and Greek, and also having heard his introductory address when appointed Professor at the Victoria University. He also wished to say how highly gratified the profession were with the report of the Departmental Committee. At the time there were statements made that it appeared strange that there should be a Committee dealing with veterinary education without having a veterinary surgeon upon the Committee. He thought that if every member had been a veterinary surgeon the report would not have been better. He hoped the report would not be lost sight of by Parliament, because it would undoubtedly be good for the country if it was taken favourably into consideration.

Sir ALFRED HOPKINSON, on behalf of himself and fellow guests thanked the Association for the hospitality and the charming manner in which they had been received. It was a matter of satisfaction to speak almost as a member of the Corporation. He was an outside man, but he always remembered his father's close connection with that body, and recognised and defended, both in public and in private, the work they were doing. If he were a member he would move a resolution that they should follow the example of Liverpool in one respect, but he would refrain from saying what it was. The members of the Corporation knew what it was quite well. From Mr. Woods' remarks they would gather that he was not afraid to undertake anything. Regarding the class Mr. Woods had mentioned he remembered being suddenly called upon one evening to take that partjcular class which, however, was not in his line at all. They got along badly, but if the lecturer was not good the students were. When he was asked to undertake the duties of President of the Departmental Committee in regard to veterinary education in the British Empire his friends wondered whether he was an expert on horses or an expert on the question of the milk supply. He was one of those people whose views are sometimes sought after and, in a parliamentary contest he was engaged in, the milkmen, who were against him, came to see him. (He forgot whether it was at the Reform Club or the Constitutional Club). He happened to have had a milk case before, and was well posted as regards the analysis of milk, etc., and they thought he must have devoted his life to the subject. So word went round that they might support his particular colour (he forgot which colour it was). The result, however, was not successful for him, but no doubt it was of great benefit to the country—he did not get in.

Allusion had been made that the introduction to the report of the Departmental Committee is out. He had not seen any comments upon it and had heard none until that night. He hoped the document would give the public a good deal of important information which the public had not got before about the veterinary profession. The thing that struck him most of all was that the profession had attended to the education of its own

members by itself and is doing so still. It is a remarkable example how members of the profession, without support, have carried on this work and are still making great personal efforts and sacrifice to further improve it, feeling the importance and the value of the profession to the public, both in State and municipal service, and also in private practice. He was not sure whether in another generation the horse may not be an extinct animal, at all events they would find specimens of it in the buildings recently erected. Still the profession would go on, and he believed in two directions. One direction would be in connection with the food supply of the nation. And in this direction alone an enormous field was open to the profession to do much special work of a highly technical character, and for which they were particularly qualified. Another way in which the profession will go on—apart from private practice—is in relation to the whole question of eliminating diseases of animals of various kinds. That is not a question that affects our own districts only—that is the first part of the business—but the empire as a whole. He believed there was a general desire to see what could be done to train men in the fullest way to meet developments through the advance of science, and a general feeling that the members of the veterinary profession are doing a valuable work in the progress made.

Mr. STENT had great pleasure in proposing "The Ladies," although he approached the task with fear. It had been said that Paradise is inhabited chiefly by women, and men are only admitted after performing heroic deeds. He thought the ladies present had performed heroic deeds without receiving the hospitality that they deserved. After the National Veterinary Association's dinner last year, which was a great success, being graced by the presence of ladies, the Lancashire V.M.A. could not do otherwise than follow suit. In their profession, as in many others, it is the ladies who perform valiant deeds and assist a great deal in the progress and advancement of the different societies to which their husbands belong. He coupled the name of Mrs. G. H. Locke with the toast.

Mr. W. LOCKE, brother of the President, suitably responded on behalf of the ladies.

An excellent programme of music had been prepared and was highly appreciated. The artists were Madame Annie Radford, Mr. J. B. Ritcher, Mr. E. Thornley Dodge, and Mr. J. Wadsworth.

NORTH WALES VETERINARY SOCIETY.

A meeting was held at the Station Hotel, Llandudno Junction, on September 24th, 1912, at 2 p.m. The following members were present: Mr. O. Trevor Williams, President, Messrs. F. Booth, W. J. Bushnell, Owen Thomas, C. W. Cartwright, H. Williams, Richard Jones, hon. treas., L. W. Wynn-Lloyd, hon. sec.

Visitors: Messrs. David Keir and J. O. Rees.

Apologies for non-attendance were received from Dr. Evans, Mr. J. H. Wynne, and Prof. Share-Jones.

The minutes of the last meeting were read and confirmed.

CORRESPONDENCE.

The SECRETARY read a letter from Mr. W. Shipley, F.R.C.V.S., hon. sec. to the Victoria Benevolent Fund, thanking the Society for their handsome donation.

A letter from Mr. S. Stockman, M.R.C.V.S., asking that each member of the Society should subscribe to the Tenth International Veterinary Congress to be held in London in 1914.

It was resolved, that as half the surplus from the entertainments of the National meeting held at Carnarvon had been voted to the above Congress in 1914, the North Wales Society had done its share in supporting the Congress.

A letter from Mr. T. C. Toope, M.R.C.V.S., Hon. Sec. of the South Eastern Veterinary Medical Association enclosing a copy of the present scale of fees of Veterinary Inspectors to County Councils. All members present agreed that the present scale of fees was very unsatisfactory and it was proposed "That all the Veterinary Associations should send petitions to the various County Councils with a view to raising the present fees."

These letters were left over until it was decided whether the Society was to be carried on or not.

The HON. TREAS. proposed that as the attendance at the last few meetings had been so bad, the society should be wound up, and each member join a larger society.

This proposition received no seconder.

Mr. BOOTH said it was good to have a society like this, as it kept one in touch with the outside world and we get information through it which we otherwise should not receive.

Mr. BUSHNELL supported this idea.

The HON. SEC. proposed that owing to the amount of money in hand the members be allowed to run without paying subscriptions for a year or two.

Mr. BOOTH suggested that the fee be reduced to 2/6 or 5/-.

Mr. H. WILLIAMS: Personally I should prefer to pay nothing, but I think the full fee should be retained.

Mr. C. W. CARTWRIGHT was in favour of a reduced fee.

Mr. BOOTH gave a notice of motion "That no fees be paid this year, and that the question of fees be discussed at the next meeting."

ELECTION OF OFFICERS.

President.—Mr. BOOTH was proposed by Mr. H. Williams and seconded by the Hon. Treasurer. Carried.

Vice-president.—Mr. H. WILLIAMS was proposed by the President and seconded by Mr. C. W. Cartwright.

The *Hon. Sec.*, Mr. L. W. Wynn Lloyd, and the *Hon. Treas.*, Mr. R. Jones, Towyn, were proposed for re-election by the President, and seconded by Mr. Booth. Carried.

SEPTIC ARTHRITIS IN YOUNG ANIMALS.

By DAVID KEIR, M.R.C.V.S., Llandudno.

Mr. Chairman and Gentlemen,—When your worthy secretary, Mr. Wynn Lloyd, asked me a few weeks ago to write a short paper for discussion at your Annual Meeting, I must admit that I felt rather afraid of tackling the job, but after a little persuasion I promised him that I would do my best to write a short essay. I do not intend to keep you very long for I know none of us are fond of long lectures, but my main idea is to run over the subject of "Septic arthritis in foals," briefly, and in so doing I hope to raise a few points for discussion, in which I hope most of us will join.

SEPTIC OR PYÆMIC ARTHRITIS.

Pyæmic arthritis, joint ill or navel ill, is a peculiar form of septic inflammation, especially affecting suckling herbivorous animals, and is characterised by swelling of one or more of the joints of the body, then with a tendency to pus formation. I intend to confine myself to the cause, symptoms and treatment of the disease in foals, for in the other animals, professional advice is seldom sought, slaughter being deemed more rational procedure.

Several years ago, navel ill was looked on as a very serious condition, and most clients knowing this, entertained little or no hope of a recovery, nor had they much faith in the various methods of professional treatment, but in these days the cause was obscure, and as we all know treatment is of little avail in any disease until the cause has been discovered. Within

recent years several experiments and observations have been conducted, with the result that the profession as a whole are perfectly satisfied that the primary seat of the disease is in the navel, and from there it spreads to various joints of the body.

Etiology.

The true cause of joint-ill has been discovered in the separation of two organisms, a micrococcus and a bacillus, and they are usually found together. These have been cultivated from cases of the disease and successfully inoculated into other sucklings, with the production of navel-ill in its most typical forms. I have read many authors to try and get a uniform pathology and bacteriology of these bacteria, but although most of them are of one mind in regarding these as the causal organisms, they (the authors) differ more or less in describing the exact morphological and cultural characters of the individual bacteria. The micrococcus appears to be present more frequently. It is larger than an ordinary coccus, being over one micron in diameter. It stains with most of the ordinary dyes, but does not retain Gram's stain.

The organisms are present in soils, manures, and all forms of filth, and it is only when the umbilical cord is contaminated with these media that the disease results. The infection may cause only simple phlebitis of the umbilical vein, but if the organisms are virulent, and mixed with pyogenic bacteria, the condition almost invariably degenerates into suppurative phlebitis.

Whilst, in fact, it is comparatively easy to deal with phlebitis of the jugular or mammary vein, surgical or medical assistance becomes extremely difficult in this case, because the inflamed vein, is situated deeply in the abdomen, and passes through one of the most important internal organs—the liver. After the cord is ruptured both the veins and arteries become plugged, and bleeding ceases. This plugging should end in organisation of the clot and obliteration of the vessels. If, however, the wound is infected micro-organisms make their way between the clot and walls and extend along the inner surface of the vein, infecting first the clot and then the vein, and thus setting up suppurative phlebitis.

Cases in which the cord has broken off too short to be properly ligatured, or where the floor of the stable or loose-box is in a filthy condition, are those which frequently become infected. Navel ill is oftenest seen in early foals, for these, owing to cold and rough weather, have to be kept in the stable, where they are inclined to lie a lot, and so expose the navel to infection.

The organisms set up an inflammation in the umbilical cord and its surroundings with thrombosis of the blood vessels of the cord. The thrombi, becoming infected with the bacteria, undergo suppurative disintegration and infection is carried to various parts of the body by the blood stream. Other authors state that owing to the plugging of the umbilical vessels with thrombi, all connections with the interior of the cord and the external air are shut off, and that the spread of the infective material starts from the peritoneum around the navel ring. But this theory is of little value, for if such were the case, fatal peritonitis would ensue and death result in a few days, whereas we all know that the average duration of illness of pyæmia arthritis is about two to three weeks, although acute cases may end fatally in a few days.

Certain people believe that there is a predisposition to the disease accompanying a peculiar conformation of cord, but this belief must be regarded as false.

Symptoms.

The symptoms usually appear in a few days after birth, or in from two to three weeks. In nearly all cases a few general symptoms precede the appearance of the arthritic affection. The animal appears dull, there is a slight rise in temperature 103° F. to 104° F., a disinclination to suck the mother, and a tendency to lie down a lot, but these premonitory symptoms may be absent, and the first indication may be a marked swelling of some of the joints. In all cases, the distension develops very quickly. Any of the joints of the limbs may be affected, and cases affecting the ribs and vertebræ have been recorded. The most common situations are the knees, hips, stifles, and hocks. The swelling, which is hot, tense, and painful, may start in the hips and spread to the stifles or hocks, or may start lower down and proceed upwards. In all cases there is great pain on pressure and marked lameness in walking. In some instances, the foals are unable to rise at all, and have to be held up to enable them to suck. This is particularly the case where several joints are affected. Along with these symptoms we generally have a fœtid diarrhœa, or sometimes diarrhœa and constipation alternating. After slight exercise, the animal sweats very readily, owing to the acute pain, and soon becomes thin and debilitated. I have noticed in nearly all cases a yellow membrana nictitans, denoting liver disturbance. On examination of the umbilicus we usually find the cord and its surroundings hot and painful, and containing pus which can be squeezed out on pressure. But, in other cases, there are no visible changes in the cord, on account of its having healing up after being contaminated, and in my opinion these are the least favourable cases to deal with because there being no exit to the contained pus, it is absorbed with disastrous results.

Often we have the joints bursting and emitting a foul smelling mixture of pus and dead tissue. No matter what treatment be adopted these cases are generally fatal. Again, owing to the metastatic nature of the disease we may have symptoms of various complications presenting themselves, such as those of inflammation of the lungs, or more often of the liver, but these do not come under our heading. In those favourable cases which do recover we usually have stiffness and swelling of the joints for a long time after the constitutional symptoms have abated, and in all cases recovery takes place slowly, and the animal's growth is stunted.

Prognosis.

In all cases a guarded prognosis should be given, and in those where complications have set in the prognosis is very unfavourable. The most hopeful cases are those in which the foals are able to walk about and suck their mother, and in which the practitioner has been early called in. Persistent diarrhœa and a constant rise of temperature, especially after the continued administration of internal astringents and febrifuges, usually denotes an unfavourable termination.

On the other hand, recovery often follows when the diarrhœa has subsided and the temperature regains its normal.

Preventative Treatment.

Considering the pathogeny of the disease, prophylactic treatment is first called for. Strict antiseptic measures must be adopted. The stable or loose box should have a bedding of clean straw, and be freely sprinkled with disinfectants. After birth the foal's navel should be thoroughly cleansed and the cord tied with an antiseptic ligature, about 1 in. to 1½ inches from the umbilicus. One of the best of navel dressings is that recommended by the Board of Agriculture: "Immediately after birth the navel string is to be ligatured with an antiseptic ligature and soaked with a solution of iodine in methylated spirits (1 : 20) : in 24 hours afterwards and once for the next 3 or 4 days it is to be dressed with a 1 : 20 sol. of iodoform in flexible collodion. The iodine and iodoform act as antiseptics and

germicides, and the collodion forms a thin film over the umbilicus, which prevents the access of any organisms.

Various other dry dressings such as boracic acid and iodoform, tannoform, etc., are used, and all serve the purpose very well. As a preventative, some farmers apply a small sheet of antiseptic cotton wool, fixed to the umbilicus by four strips of pitch bandage, but the majority of clients would not go to such trouble until perhaps the case was beyond all professional aid, and then they would almost sacrifice anything to get a recovery.

Again I think that the best preventive is to turn the mare and foal out to grass as soon as possible after birth, if the weather is at all favourable; the hygienic conditions are better and the atmosphere purer, the foal's constitution becomes stronger and so enables him to resist diseases which are so common in filthy stables.

Curative Treatment.

Most practitioners have their own method of treatment, and each thinks his own the best, but in all cases, the employment of antiseptics in the blood stream should be employed and give the best results. Of these about the best is Pot. chlor. gr. x.-xx. twice a day along with sp. æth. nitrosi and liq. amm. acet., which act as stimulants and febrifuges. Where there is persistent and fœtid diarrhœa, I have seen good results follow the employment of quinine sulph. gr. iij-viij given with dil. sulphuric acid in water. The quinine acts as an antiseptic and the dil. sulphuric acid as an astringent in the intestinal canal. With regard to the umbilicus, if sinuses exist in the cord these should be carefully probed to find their extent, and opened up to allow of all discharge. Afterwards they should be washed out daily with a sol. of carb. acid, cresol, zinci chlor., etc.

Sometimes when the sinus is blind, the application of a mild blister round the umbilicus has the result of checking any further suppuration. But if the sinus is not blind the application of a blister only leads to further absorption of pus, with more serious results.

The treatment of the swollen joints should consist in fomentation with hot water for 20 minutes twice a day, then thoroughly drying and rubbing in a liniment composed of: ℞ Ext. belladonnæ, glycerinum, sapo mollis, sp. tereb, aqua (boiling) ad W. qt. This relieves the pain and helps to promote absorption. Some practitioners leave the distended joints alone until the animal becomes a yearling, and then apply an absorbent blister, but although this undoubtedly lessens the distension, it does not cause it to disappear. Others aspirate the joints, but although this has been more or less successful in the hocks, it has been followed by disaster in most of the other joints. Where the joints burst and discharge, the treatment is purely surgical. They should be syringed out with weak antiseptic solutions until all the pus has escaped, and then treated as an open joint.

I was very amused to read the following treatment for "pyæmic arthritis" in an American journal, the other day. "Freely open the enlarged joints, allow the liquid to escape, inject with hydrogen peroxide, and when thoroughly cleansed and all pus clots removed, inject some iodine and take care that it is all drained out; then paint the outside with tincture. Internally hydra. iod. rub.; potass. iod. of each ʒi. rectified spirits ʒij. aqua ad. ʒviij. One tablespoonful in one ounce of the mare's milk 3 times a day. If milk is not used the mouth of the foal will be blistered. I also make an autogenous bacterin from the pus of these colts, which seems to be a great help; this is injected every 4 days subcutaneously. If the colt is in a weak condition a tonic is indicated. If diarrhœa is present, I use sulpho-carbolates compound, which checks this condition in a very short time. If the above treatment is carried out carefully, 85% of affected colts recovered." I may say that I have never tried this treatment, but thought I would mention it, as it might come in useful for some case you wanted to experiment on.

Within recent years various new drugs have been employed in the treatment of pyæmic arthritis, and I should like to give you the history of two cases treated with nuclein and acetozone, with good results.

Case I.—Black Shire filly foal, four weeks old; both hocks severely distended and very painful, sweating, disinclined to suck, and lying a lot; been quite healthy the previous day. Gave pot. chlor. twice a day internally for ten days, and rubbed the hocks with the belladonna liniment. In a fortnight the filly was well again and able to suck, but her hocks were still distended. These were injected with a 1-500 sol. of acetozone in distilled water, injecting four drachms in each hock every third or fourth day for four times, at the end of which the swelling had disappeared and no bad results remained.

Case II.—Bay Shire foal, six days old; unable to rise, showed great pain in knees, hocks, and all four fetlocks, the navel was wet but smelled quite sweet. He received the same internal treatment as the first case, and had the whole of his legs fomented and rubbed with the belladonna liniment. In addition he received a hypodermic injection of nuclein 40 minims. This was continued for three days when the swellings subsided and the foal did well. There is no doubt that the nuclein has a wonderful power of increasing the leucocytes, but unless used in the early stages its value is not attended with beneficial results.

Differential Diagnosis.

There is only one disease which may be confounded with pyæmic arthritis, and that is acute articular rheumatism, but if care be exercised, disease of the joints in sucklings, a few days or weeks old, especially if accompanied by suppuration in the navel, is indicative of pyæmic arthritis. Further, the formation of abscesses in articular rheumatism is very rare, so also is the appearance of articular rheumatism in suckling, a very uncommon condition.

Post-Mortem.

These findings vary according to the spread and intensity of the disease, but most cases show inflammation of the umbilical cord and its structures, with thrombosis of the vein and arteries. Thrombosis of the portal vein and its branches in the liver are occasionally seen. In the joints, the synovial membrane is thickened and injected, and the synovial fluid is opaque, increased in quantity, and mixed with pus and purulent coagula. The articular cartilage is ulcerated and destroyed, the ends of the bones sometimes becoming necrotic. The muscles of the affected joints have undergone fatty degeneration, so also have the heart, liver, and kidneys.

Finally, we find metastatic foci in most of the internal organs, exhibiting the spread of the disease and denoting new centres of infection.

A very interesting discussion ensued, in which all the members present took part.

A hearty vote of thanks was accorded to the Essayist, after which the members adjourned to a high tea.

It was agreed that the next meeting of the Society be held at Wrexham.

Curious Parasitic Effect.

Extract from letter of client:—Several horses in this neighbourhood have rubbed the hair off the root of their tails, which gives them the appearance of being hog-maned.

Northampton County Inspectors and the Tuberculosis Order of 1913.

A meeting of the Veterinary Inspectors of the Northants County Council was held at the Grand Hotel, Northampton, on Monday, March 3rd. The object of the meeting was to discuss generally the new Tuberculosis Order, and to decide as to the methods by which the veterinary provisions of the Order could best be carried out both in the interests of the public and of those veterinary practitioners upon whom, presumably, the major portion of the work will devolve. The whole of the Veterinary Inspectors of the county were present, viz.: Messrs. C. W. Page, Banbury; W. W. Grasby, Daventry; R. R. MacGregor, Market Harborough; C. W. Crofts, Northampton; H. H. Nicholls, Oundle; W. W. Beal, Thrapstone; D. Forwell, Towcester; J. R. Dykes, Wellingboro; and Trevor Spencer, Kettering.

The circular issued to Local Authorities, with copies of the Order contains a request to such authorities that they will give immediate consideration to the steps to be taken to put their officers in a position to carry the Order into effect; the meeting consequently decided to ask the Contagious Diseases Committee to receive a deputation of Veterinary Inspectors in order that the whole of the veterinary provisions might be laid before them from a practical standpoint, preparatory to their adoption of any particular system by which the veterinary duties shall be performed.

The following gentlemen were appointed as a deputation to wait on the Contagious Committee in the event of the necessary permission being forthcoming: Messrs. W. W. Grasby, C. W. Crofts, C. W. Page, J. R. Dykes, and Trevor Spencer.

During the meeting, which was characterised by great unanimity and which lasted about two hours, the following matters in connection with bovine tuberculosis were thoroughly discussed, viz.:

Some difficulties of diagnosis:

The importance of employing the tuberculin test as the chief aid to diagnosis:

The necessity for tuberculin to be under Government control, procurable only by medical men and veterinarians, and of standard manufacture:

The impossibility of carrying out inspections of animals exposed for sale in public sale yards with a view to the detection of tubercular disease:

The question of the valuation of a suspected animal and whether this would be part of the veterinary inspectors' duties:

The question of fees for employing the tuberculin test and for other work in connection with the Order.

It was further decided that a short account of the proceedings be sent for publication to *The Veterinary Record* with a view to procuring, if possible, the co-operation of veterinary inspectors of neighbouring and other counties, in order to secure, as far as practicable, a uniform system of procedure on the part of those upon whom the duties of carrying out the veterinary provisions of the Order will, presumably, devolve.

Veterinary inspectors who may desire to co-operate with the Northamptonshire inspectors for the above-mentioned purposes are invited to communicate, collectively or individually, with the undersigned.

Trevor F. Spencer, M.R.C.V.S.

Kettering, March 4.

DISEASES OF ANIMALS ACTS 1894 TO 1911, SUMMARY OF RETURNS.

Period.	Anthrax. Outbreaks Confirm'd	Anthrax. Outbreaks Reported	Anthrax. Animals Confirm'd	Anthrax. Animals Reported	Foot-and-Mouth Disease. Outbreaks	Foot-and-Mouth Disease. Animals	Glanders † (including Farcy) Outbreaks	Glanders † (including Farcy) Animals	Parasitic Mange. Outbreaks	Parasitic Mange. Animals	Sheep Scab. Outbreaks	Swine Fever. Outbreaks	Swine Fever. Slaughtered.
GT. BRITAIN. Week ended March 1	16		17				3	14	64	138	2	35	341
Corresponding week in 1912	23		23				7	14	94	190	8	49	545
Corresponding week in 1911	21		23				3	9			16	34	299
Corresponding week in 1910		32		39			7	16			9	15	160
Total for 9 weeks, 1913	119		133				31	104	741	1621	91	302	3477
Corresponding period in 1912	229		257				30	60	1204	2902	122	532	6856
Corresponding period in 1911	199		225				42	164			250	307	3369
Corresponding period in 1910		274		332			61	185			244	203	1539

† Counties affected, animals attacked: London 18, Middlesex 1.

Board of Agriculture and Fisheries, March 4, 1913.

IRELAND. Week ended March 1	...	...	...	...	...	...	Outbreaks 1	6	1	18
Corresponding Week in 1912 ...	...	...	...	...	...	...	3	9	6	22
Corresponding Week in 1911 ...	...	...	...	...	...	...	1	10	3	22
Corresponding Week in 1910 ...	...	2	...	...	...	...	...	23	...	...
Total for 9 weeks, 1912 ...	...	...	...	...	...	...	65	167	35	179
Corresponding period in 1912 ...	1	1	...	...	...	...	23	167	27	214
Corresponding period in 1911 ...	3	3	...	...	...	...	22	169	26	481
Corresponding period in 1910 ...	4	6	...	...	...	...	17	191	6	215

† These figures include animals slaughtered and found affected on post-mortem examination.

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, March 3, 1913

Note.—The figures for the Current Year are approximate only. * As Diseased or Exposed to Infection

ARMY VETERINARY SERVICE.

Extract from *London Gazette*.

War Office, Whitehall, March 4.

Special Reserve of Officers.

Army Veterinary Corps.

The following to be Lieuts. (on probation):—

J. A. McMenamin, R. C. Wheeler, late Cadet Corpl., Royal Veterinary College of Ireland, O.T.C. Dated March 3.

Col. F. W. Forsdyke arrived from India on Feb. 25th on completion of a tour of Foreign Service, and has been posted to York for duty as Assistant Director of Veterinary Services. Northern, Scottish, and Western Commands.

The undermentioned officers arrived from India on March 5th, on completion of a tour of Foreign Service and have been posted to the stations stated against their names:—

Capt. L. L. Dixson to Brighton; Capts. T. Lishman and S. Black to Aldershot.

The following officers, Army Veterinary Corps Special Reserve, joined at Aldershot on March 4th, for a three months course of instruction:—

Lieuts. J. A. McMenamin. W. E. Phipps, and R. C. Wheeler.

Lieuts. A. S. Mathias, Army Veterinary Corps Special Reserve, is about to be seconded to take up an appointment as Government Veterinary Officer, Straits Settlements.

OBITUARY

John Toms, M.R.C.V.S., Ivybridge, Devon.
Graduated, Lond: Dec., 1892.

Mr. Toms died on Feb. 10th from Epithelioma of the larynx. Aged 47 years.

CORRESPONDENCE.

"A SURPRISE."

Sir,

I beg to thank Mr. Crichton for his kind and experienced reply to my letter "re" the above. Previous to reading that reply I was not aware that it was a usual occurrence for a cow to have twin calves, part with one cleansing at the time, and the other eight days later. I believe there are two cleansings for twin calves however.

In the case I quoted I could not find any cleansing when I carefully explored the genital passage, the "os uteri" was almost completely closed, there was no straining or discharge from the vulva and to all appearances she has got rid of all the fœtal membranes.

As a rule I think cows which calve prematurely often retain their cleansings for an undue period, but it is not my experience to find appreciable systemic disturbance unless the cows have retained these membranes more than a week and septic absorption has taken place. Usually my clients leave them alone for about that time and then I remove them, irrigate the genitals with mild antiseptic fluid (but do not pump it into the womb) and do not see them again. The symptoms Mr. Crichton describes are those of septicæmia. I use uterine pessaries with success, and quite agree with Mr. Crichton about washing out uterus. Again thanking him I remain, yours faithfully,

W. E. Blackwell.

Norfolk House, Towcester, March 3rd.

INSPECTORS UNDER "CRUELTY" ACT.

Sir,

I think the enclosed will explain itself, and there may be some veterinary surgeons who would like to apply for the posts at £500 per annum. At any rate the question of all these appointments going to medical practitioners should not be lost sight of.—Yours, etc.,

Dalegarth, Windermere. Frank W. Garnett.
March 13.

Cruelty to Animals Act, 1876.

Sir,

I understand the Secretary of State is about to appoint two additional inspectors under the above Act, and I write to ask if Members of the Royal College of Veterinary Surgeons are eligible for the posts, as it would appear that they are more qualified for the post than ordinary medical practitioners. An early reply will oblige.—Yours truly,

Frank W. Garnett.

To Private Secretary, Home Office, London.
Feb. 26, 1913.

Home Office,
Whitehall, S.W.

Dear Sir,

I beg to acknowledge the receipt of your letter of the 26th instant, and to forward you the enclosed memorandum relating to the appointment of Inspectors under the Cruelty to Animals Act. I may call your attention to the last paragraph, and while consideration would not be refused to applicants possessing veterinary qualifications, I should, perhaps, warn you that a considerable number of applications have already been received from qualified medical men. If you desire to send in an application, perhaps you would be good enough to do so as soon as possible.—Yours faithfully,

J. T. Henderson.

Frank W. Garnett, Esq., M.R.C.V.S.
28th February, 1913.

CRUELTY TO ANIMALS ACT, 1876.

Appointment of Inspectors.

The Secretary of State is about to appoint two additional Inspectors under the above-mentioned Act. The appointment will be for one year in the first instance, and afterwards probably for five years. The initial salary will be £500, together with the travelling allowances usual in the Civil Service; and if the appointment is continued will rise by annual increments of £20 to £600.

The duties of the Inspectors will be to pay frequent visits to all premises within their respective districts which are registered under the Act, in order to see that the provisions of the law and the conditions imposed by the Secretary of State are fully obeyed, and to carry out any other duties of inspecting, reporting and advising with which they may be entrusted by the Secretary of State. They will be required to give their whole time to these duties.

For the purposes of inspection, England and Wales will be divided into two districts. The Inspector for the Southern District will reside in London, and will also act as Assistant to Dr. Thane, the Chief Inspector. The Inspector for the Northern District will reside at a convenient centre within his district. The Inspectors may, as circumstances require, be transferred from one district to the other or to Scotland.

Candidates for these posts, who should be registered medical practitioners, should apply to the Private Secretary, Home Office, London, and their applications should be accompanied by any testimonials and evidence of their qualifications which they desire to submit.

Original articles and reports should be written on one side of the paper only and authenticated by the names and addresses of writers, not necessarily for publication.